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Sterling Environmental Engineering, P.C.

February 8, 2013

Mr. Keith Goertz
NYS Department of Environmental Conservation
Region 4
1130 N. Westcott Road
Schenectady, New York 12306-2014

Subject: Troy Belting & Supply Company
Supplement to 2012 Environmental Investigation Report –
Additional Monitoring Well Installations
STERLING File #2011-31 (Task 550)

Dear Mr. Goertz,

Sterling Environmental Engineering, P.C. (STERLING) conducted a supplement to the environmental investigation at Troy Belting & Supply Company, located at 70 Cohoes Road, Watervliet, Town of Colonie, NY (subject property) and reported to the New York State Department of Environmental Conservation (NYSDEC) on September 20, 2012. In accordance with the planned scope of work provided in the Conclusions and Recommendations of the September 20, 2012 letter report, STERLING provides the following summary of the supplemental site investigation and findings.

1.0 INTRODUCTION

The following scope of work was conducted:

- The property boundary was surveyed by a licensed surveyor to ensure the well is located on the Troy Belting property.

- On December 10 & 11, 2012, two (2) shallow bedrock monitoring wells were installed. Well MW-4 was installed near the property line downgradient of the source. MW-5 was installed approximately seven (7) feet from MW-2 which was previously determined to be in the impacted area. Due to the shallow depth to bedrock at the site (4.0 to 8.5 feet below ground surface (bgs)) and the absence of groundwater in the overlying soil, no overburden wells were installed.

- Continuous soil screening with a Photo Ionization Detector (PID) was conducted for the two (2) boring locations. One (1) soil sample was collected from the MW-5 boring at the location and depths of the greatest PID readings encountered.

- A survey by a licensed land surveyor was completed to document the location and elevations of the top of the monitoring well casings of the two (2) newly installed monitoring wells.

- On December 20, 2012, one (1) week following development of the two (2) additional monitoring wells, groundwater samples were obtained from the three (3) previously installed wells and the two (2) new wells.

24 Wade Road ✦ Latham, New York 12110 ✦ Tel: 518-456-4900 ✦ Fax: 518-456-3532
E-mail: sterling@sterlingenvironmental.com ✦ Website: www.sterlingenvironmental.com

- Five (5) groundwater samples (one (1) per well), one (1) duplicate from MW-5, one (1) matrix spike/matrix spike duplicate (MS/MSD) and one (1) trip blank were analyzed for the following parameters:

  - USEPA Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) plus 30 Tentatively Identified Compounds (TICs).

  - USEPA Target Analyte List (TAL) Metals.

- A Data Usability Summary Report (DUSR) was generated by an independent third party, Alpha Geoscience, Clifton Park, NY.

2.0 BEDROCK MONITORING WELL INSTALLATION

In addition to the three (3) bedrock monitoring wells installed in April 2012 as discussed in the 2012 Environmental Investigation Report, two (2) supplemental monitoring wells were installed by Aquifer Drilling and Testing, Inc. (ADT) and are labeled MW-4 and MW-5 on Figure 1. The well installations were supervised by STERLING on December 10 and 11, 2012. Daily Field Reports for the installation of the monitoring wells are included in Appendix A. A 2-foot split spoon was used for soil sampling until bedrock was encountered. STERLING logged the soil type and monitored undisturbed soil samples in the split spoon and by headspace on removed and bagged soil samples with a PID. Monitoring Well Construction Details are included as Figures 2 and 3, and Soil Boring Logs are provided in Appendix B. Each well was drilled to at least 10 feet below top of bedrock and the top of the screen is located at least one (1) foot below the top of the bedrock.

- MW-4 was installed near the property line on the northern edge of the subject property downgradient of the source based on groundwater flow direction. All PID readings for soil samples ranged from 0.00 to 0.6 parts per million (ppm). Since the PID readings did not indicate the presence of contamination, no soil samples were collected for laboratory analysis.

- MW-5 was installed as close to the building as equipment would allow on the northern edge of the existing building between the building and MW-2, where the most concentrated soil contamination was previously identified. PID background readings ranged from 0.1 to 0.4 ppm for the soil samples at MW-5. The PID headspace readings for soil sample intervals were 0.4 ppm for 0.5-2.0 feet bgs, 246.0 ppm for 2-4 feet bgs, and 225.0 ppm for 4-6 feet bgs. Soil samples (S01-MW5, and DUP-1) were obtained from 4-6 feet bgs utilizing the Terracore samplers and were analyzed for the following parameters:

  - USEPA Target Compound List (TCL) Volatile Organic Compounds (VOCs).

  The recovery of the 4-6 feet interval was limited. The volume remaining after the VOC bottles were filled was insufficient to fill the metals SVOCs bottles. Therefore, the recovered soil from the 6-8 foot interval was combined with the soil from the 4-6 foot interval, and the resulting soil samples (S01-MW5 and DUP-1) were analyzed for the following parameters:

  - USEPA Target Compound List (TCL) Semi-Volatile Organic Compounds (SVOCs) plus 30 Tentatively Identified Compounds (TICs).

  - USEPA Target Analyte List (TAL) Metals.

The soil sample was analyzed by Spectrum Analytical, Inc. located in Warwick, Rhode Island, a New York State Department of Health (NYSDOH) ELAP certified laboratory. Results are discussed in Section 3.0.

Drilling equipment was cleaned between boring locations with a water-Alconox solution. All cleaning solution was placed in 55-gallon drums for disposal. All soil, bedrock cuttings and groundwater collected during drilling and well development were contained in drums, and will be disposed at Norlite Corporation, located in Cohoes, NY.

Cornerstone Surveying and Mapping surveyed the monitoring well locations on December 17, 2012. The survey recorded the well location, the elevation of the adjacent ground surface, and top of casing for each well. The monitoring well survey is provided as Appendix D.

2.1 Bedrock Characteristics and Groundwater Flow Direction

Bedrock was encountered in the two (2) new wells, MW-4 and MW-5, at approximately 5.5 feet bgs. Groundwater levels for all five (5) wells were measured on December 26, 2012 and ranged from 2.9 to 8.0 feet below top of casing. The water level at MW-3 was measured below the top of rock. The water level at MW-4 was measured at the elevation of the top of bedrock. The other three (3) observed groundwater elevations were measured to be higher than the top of rock and ranged from 1.5 to 3.5 feet above the top of bedrock.

Groundwater flow direction in the bedrock aquifer is to the northeast. A groundwater elevation contour map is provided as Figure 1.

2.2 Groundwater Quality Monitoring

The two (2) new wells were developed by STERLING on December 13, 2012 to remove sediment introduced during drilling and to enhance groundwater flow into the wells. Well development field notes are provided in the Daily Field Reports included in Appendix C. STERLING monitored Turbidity values for each well during development until Turbidity was less than 50 NTUs or stabilized, however MW-4 purged dry after 4.5 gallons and was slow to recharge. Purged water was collected and placed in drums for disposal to Norlite Corporation.

All monitoring wells were purged and sampled using low-flow methodology on December 20, 2012. Purged water was collected and placed in drums for disposal to Norlite Corporation. The low flow sampling data sheets are provided in Appendix E. Five (5) groundwater samples (one (1) per well), one (1) duplicate from MW-5, one (1) matrix spike/matrix spike duplicate (MS/MSD) and one (1) trip blank were analyzed for the following parameters:

- USEPA TCL VOCs and SVOCs plus 30 TICs.
- USEPA TAL Metals.

Groundwater samples were analyzed by Spectrum Analytical, Inc. located in Warwick, Rhode Island, a NYSDOH ELAP certified laboratory. Results are discussed in Section 3.0.

3.0 ANALYTICAL RESULTS

Soil and groundwater samples were analyzed following New York State Analytical Services Protocol (ASP) Category B deliverables.

The soil and water sample results are summarized in Tables 1 and 2 and the laboratory reports are included in Appendix F. Data Usability Summary Reports (DUSRs) are summarized in the following section.

3.1 Data Usability Summary Reports (DUSRs)

As specified in NYSDEC DER-10, Category B deliverables include a Data Usability Summary Report (DUSR) prepared by an independent third party not associated with the laboratory and with no direct involvement with the project.

A DUSR provides a thorough evaluation of analytical data to determine if the data meets the site/project specific criteria for data quality and use. Alpha Geoscience, located in Clifton Park, New York, prepared DUSRs for the soil and groundwater analytical data (see Appendix G).

The DUSR concluded all data are usable for the results from all samples. In terms of cautions, the parameters in the following samples were marked "E" extrapolated:

- DUP1 cis-1,2-Dichlorethene
- SO1-MW5 Fluoranthene, Pyrene, Benzo (b) fluoranthene

Parameters marked "J" are estimated. Estimated (J) data are associated with higher levels of quantitative uncertainty.

When extrapolated data were produced on a particular parameter in a particular sample as a result of initial analysis, the applicable analysis was repeated on a diluted sample, the results from the analysis of the diluted sample were recommended for reliance, and the results for that parameter and sample are reported on the data summary tables.

In conclusion, all reported data for the groundwater samples are considered usable and estimated (J) data are associated with a higher level of quantitative uncertainty.

3.2 Soil Sampling Results

A soil sample was not collected at location MW-4. One (1) soil sample and one (1) duplicate were obtained from the soil boring at groundwater monitoring well MW-5. Sample S01-MW5 was found to contain eight (8) parameters at concentrations exceeding the Unrestricted Use SCO. There were no exceedances of the Restricted SCOs for Industrial or Commercial Use listed in 6 NYCRR Subpart 375-6.8(b).

Results for the Duplicate sample collected at MW-5 are consistent with the S01-MW5 sample except the DUP1 result for trans-1,2-Dichloroethene exceeded Unrestricted Use SCO but not the Restricted SCO for Industrial or Commercial Use.

3.3 Groundwater Sampling Results

On December 20, 2012, STERLING sampled the five (5) bedrock monitoring wells using low-flow methodology. This sampling technique allows for the collection of a representative groundwater sample while minimizing the volume of purged water. A summary of detected parameters is provided in Table 2.

Reported parameter concentrations exceeding the NYSDEC TOGS 1.1.1 groundwater standard/guidance value for all wells sampled are as follows:

MW-1: Aluminum, Barium, Copper, Iron, Manganese, and Bis(2ethylhexyl)phthalate.

MW-2: 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,2,4-Trimethylbenzene, 1,2-Dichloroethane, 1,3,5-Trimethylbenzene, Acetone, Aluminum, Barium, Benzene, Bis(2-ethylhexyl)phthalate, Copper, cis-1,2-Dichloroethene, Ethylbenzene, Iron, Isopropylbenzene, Manganese, Methylene chloride, Naphthalene, n-Butylbenzene, n-Propylbenzene, Phenol, sec-Butylbenzene, Sodium, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, Trichloroethene, and Xylene (Total).

MW-3: Aluminum, Bis(2-ethylhexyl)phthalate, Copper, Iron, Manganese, and Sodium.

MW-4: 1,1-Dichloroethane, 1,1-Dichloroethene, Aluminum, Arsenic, Barium, Beryllium, Bis(2-ethylhexyl)phthalate, Chromium, cis-1,2-Dichloroethene, Cobalt, Copper, Iron, Lead Magnesium, Manganese, Nickel, Selenium, Sodium, trans-1,2-Dichloroethene, Trichloroethene, Vanadium, Zinc, and Vinyl chloride.

MW-5: 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,2,4-Trimethylbenzene, 1,2-Dichloroethane, 1,3,5-Trimethylbenzene, Acetone, Aluminum, Barium, Benzene, Bis(2-ethylhexyl)phthalate, Cobalt, Copper, cis-1,2-Dichloroethene, Ethylbenzene, Iron, Isopropylbenzene, Lead, Magnesium, Manganese, Naphthalene, n-Butylbenzene, n-Propylbenzene, Phenol, Sodium, Tetrachloroethene, Trichloroethene, Vanadium, Vinyl chloride, Xylene (Total), and Zinc.

Results for the duplicate sample collected at MW-5 (DUP-1) are consistent with the MW-5 results except for DUP-1 exceeded for 4-Isophopyltoluene, sec-Butylbenzene and Selenium.

3.4 Drummed Soil and Groundwater Disposal

The sampling of the drum contents was performed relative to the investigation summarized in the September 20, 2012 report by STERLING. Waste profile forms for the drummed material were prepared by STERLING and submitted to Norlite Corporation, Cohoes, NY and as additional drum contents consist of material from the same site, Norlite does not require additional analysis for disposal characterization. Following review of the profile forms, the drums will be transported and disposed at Norlite.

4.0 SUMMARY AND CONCLUSIONS

The newly installed monitoring wells MW-4 and MW-5 confirm the presence of impacted groundwater north of the building.

MW-4 located at the northern property line indicates that impacted groundwater is likely migrating from the property towards the northeast.

MW-5 soil and groundwater data suggest the source area may extend beneath the northern portion of the building.

5.0 RECOMMENDATION

Based upon these findings, an application should be made to the NYSDEC to enter the Brownfield Cleanup Program.

Please contact me should you have any questions.

Very truly yours,

STERLING ENVIRONMENTAL ENGINEERING, P.C.

Mark P. Millspaugh, P.E.
President
mark@sterlingenvironmental.com

MPM/bc
Email/First Class Mail
Attachments

2011-31\Reports\Additional Well Installations\2012 Additional Well Installation Report_ltr.doc

FIGURES

LEGEND:

MW-1	EXISTING MONITORING WELL
GRND. = 30.00' T.O.C. = 29.00' GW. = 25.00'	GROUND ELEVATION TOP OF CASING ELEVATION BEDROCK GROUNDWATER ELEVATION FOR DECEMBER 2012
	APPROXIMATE PROPERTY LINE
	GROUNDWATER ELEVATION CONTOUR
	INFERRED GROUNDWATER FLOW DIRECTION

MAP NOTES:

BASE MAP, (INCLUDING EXISTING WELL LOCATIONS, EXISTING WELL ELEVATIONS AND APPROXIMATE PROPERTY LINE,) IS PROVIDED BY CORNERSTONE SURVEYING & MAPPING, ENTITLED "MONITORING WELL SURVEY" FOR TROY BELTING & SUPPLY COMPANY, INC., DATED DECEMBER 17, 2012.

FIGURE 1

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24 Wade Road ♦ Latham, New York 12110

GROUNDWATER ELEVATIONS – DECEMBER 2012

TROY BELTING & SUPPLY CO.

70 COHOES ROAD

TOWN OF COLONIE ALBANY CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2011-31	1/5/13	1" = 60'	2011-31008	1

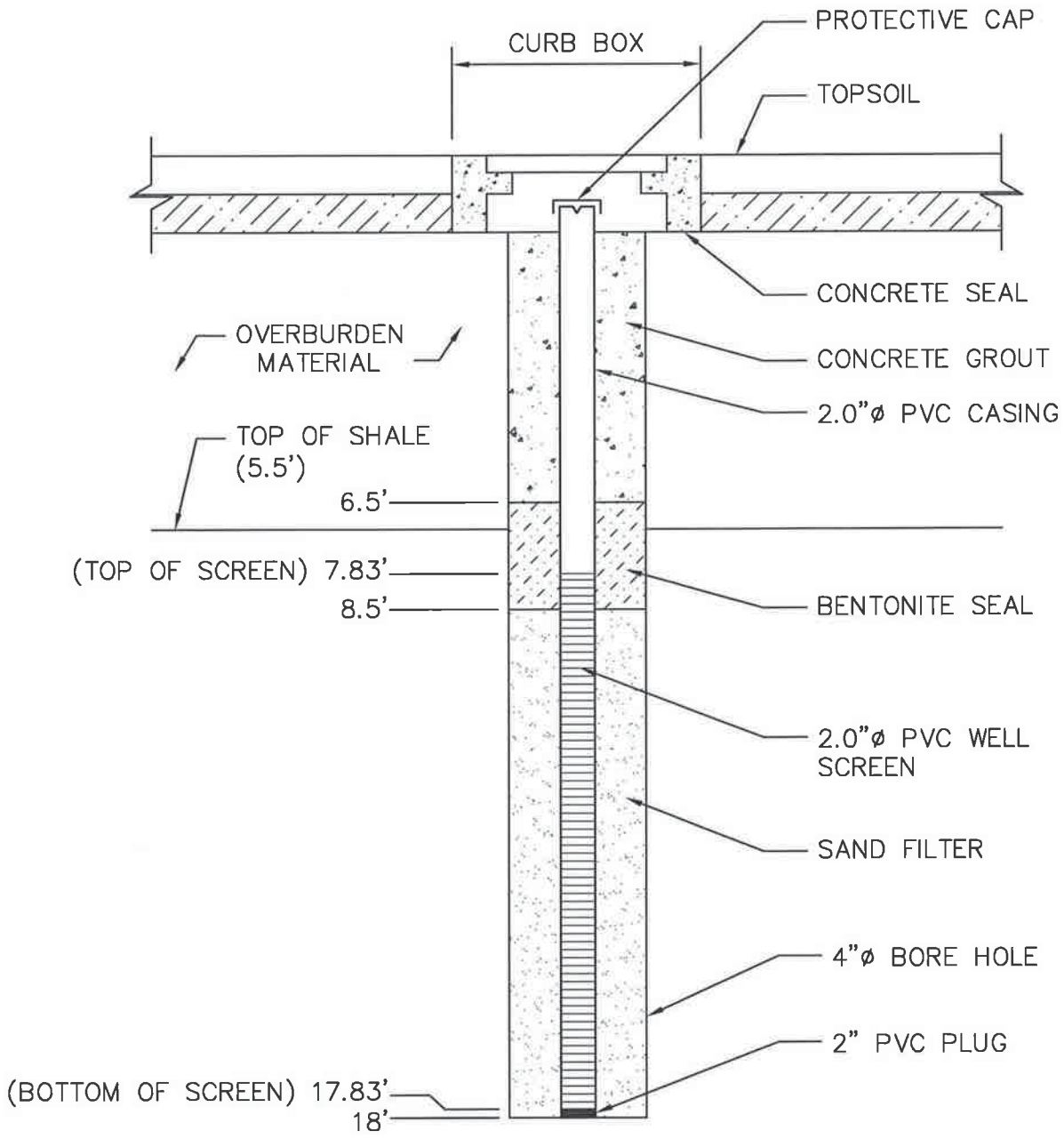

FIGURE 2

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WELL CONSTRUCTION DETAILS FOR MW-4
ONSITE MONITORING WELL INSTALLATION
TROY BELTING & SUPPLY CO.
70 COHOES ROAD
TOWN OF COLONIE ALBANY CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2011-31	1/2/13	N.T.S.	2011-31009	2

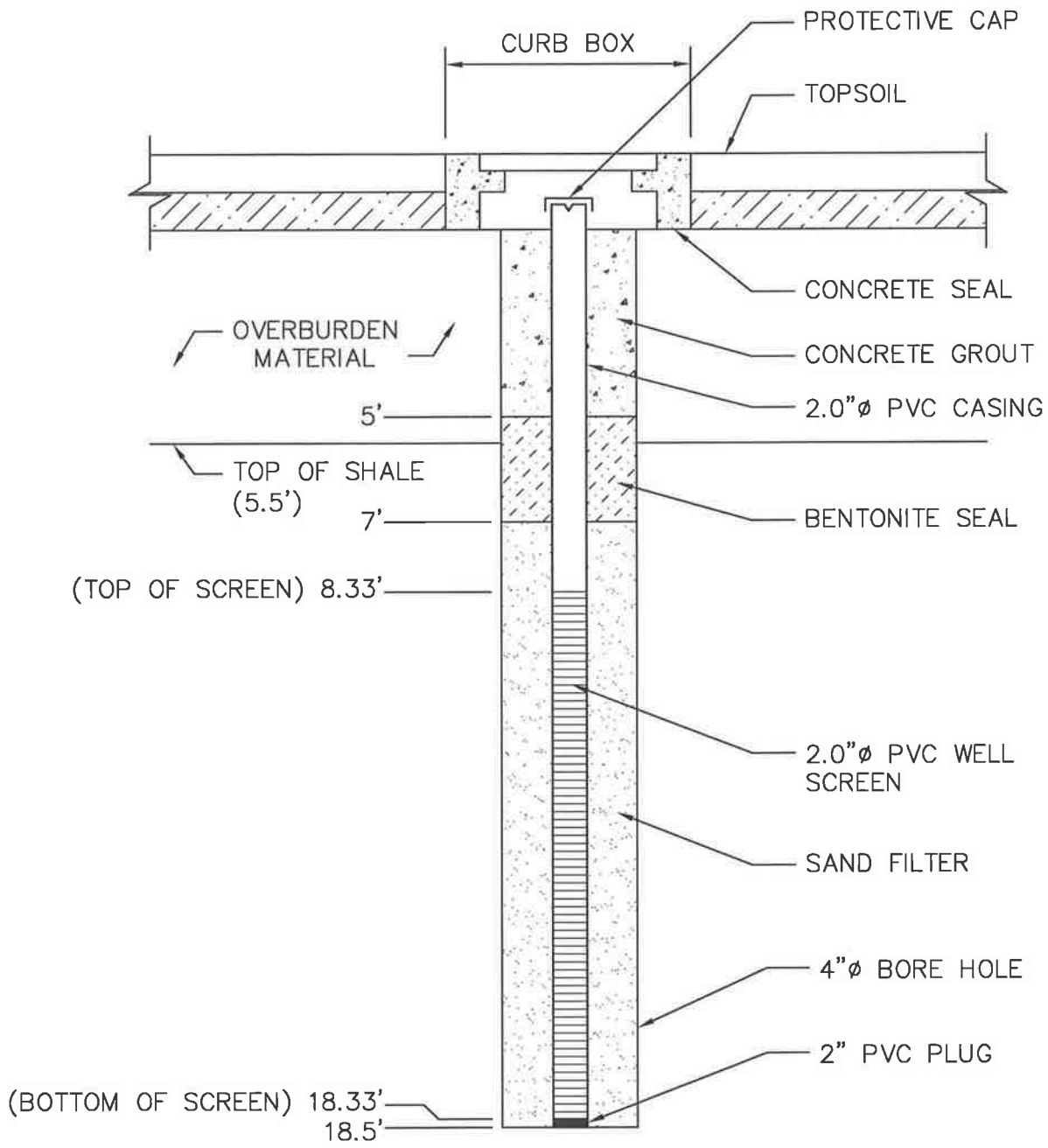

FIGURE 3

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WELL CONSTRUCTION DETAILS FOR MW-5
ONSITE MONITORING WELL INSTALLATION
TROY BELTING & SUPPLY CO.
70 COHOES ROAD
TOWN OF COLONIE ALBANY CO., N.Y.

PROJ. No.: 2011-31	DATE: 1/2/13	SCALE: N.T.S.	DWG. NO. 2011-31010	FIGURE 3

TABLES

Table 1

Comparison of Soil Sample Results for Volatile Organic Compounds (VOCs) to 6 NYCRR Part 375 Unrestricted and Restricted, Commercial and Industrial Soil Cleanup Objectives

Troy Belting & Supply Company, 70 Cohoes Road, Colonie, NY

Parameter	CAS#	Unrestricted SCO [1] (mg/Kg)	Restricted Industrial SCO[2] (mg/Kg)	Restricted Commercial SCO [2] (mg/Kg)	SO4 - MW2 (mg/Kg) Sampled 4/18/2012		S01-MW5 (mg/Kg) Sampled 12/10/2012		DUP1 (mg/Kg) Sampled 12/10/2012	
Vinyl chloride	75-01-4	0.02	27	13	**0.034**		**0.610**		**0.780**	D
1,1-Dichloroethene	75-35-4	0.33	1,000	500	0.0051		ND	U	ND	U
Acetone	67-64-1	0.05	1,000	500	0.019		ND	U	ND	U
Methylene chloride	75-09-2	0.05	1,000	500	0.0029	J	ND	U	ND	U
trans-1,2-Dichloroethene	156-60-5	0.19	1,000	500	0.02		0.150	J	**0.210**	J
1,1-Dichloroethane	75-34-3	0.27	480	240	0.004	J	ND	U	ND	U
cis -1,2-Dichloroethene	156-59-2	0.25	1,000	500	**5.2**		**7.1**		**12.0**	D
1,1,1-Trichloroethane	71-55-6	0.68	1,000	500	0.053		ND	U	ND	U
Trichloroethene	79-01-6	0.47	400	200	**25**		**1.5**		**0.560**	
Toluene	108-88-3	0.7	1,000	500	0.012		0.180	J	0.310	
Tetrachloroethene	127-18-4	1.3	300	150	**6.9**		**5.1**		**2.1**	
Ethylbenzene	100-41-4	1	780	390	0.0028	J	0.360		0.560	
Xylene (total)(mixed)	1330-20-7	0.26	1,000	500	0.012		**1.5**		**2.3**	
m, p-Xylene *	179601-23-1	0.26	1,000	500	0.007		**0.990**		**1.5**	
o-Xylene *	95-47-6	0.26	1,000	500	0.0055		**0.540**		**0.820**	
n - Propylbenzene	103-65-1	3.9	1,000	500	0.0015	J	0.750		1.000	
1,3,5-Trimethylbenzene	108-67-8	8.4	380	190	0.005		2.8		3.5	
1,2,4-Trimethylbenzene	95-63-6	3.6	380	190	0.013		**6.8**		**8.8**	
sec-Butylbenzene	135-98-8	11	1,000	500	0.0011	J	1.2		1.3	
4-Isopropyltoluene	99-87-6	---	---	---	0.0018	J	1.5		ND	U
n-Butylbenzene	104-51-8	12	1,000	500	0.002	J	3.2		3.3	
Naphthalene	91-20-3	12	1,000	500	0.0014	J	0.880		0.850	

Notes:

[1] Soil Cleanup Objectives (SCOs) from 6 NYCRR Subpart 375-6.8(a). Unrestricted Use.

[2] Soil Cleanup Objectives are from 6 NYCRR Subpart 375-6.8(b), Restricted, Commercial, and Industrial Use, Protection of Public Health.

Values in **BOLD** indicate an exceedance of Unrestricted SCOs. No exceedances of Restricted Industrial or Commercial SCOs are reported.

* SCO based on Xylene (mixed).

Laboratory Qualifiers:

J Indicates an estimated value because the parameter was detected below the reporting limit.

U - Undetected

ND - Not detected at reporting limit.

D - Value achieved through dilution.

Table 2
Troy Belting & Supply Company Groundwater Detection Summary Results
Samples Obtained on 12/20/12

Parameter	Reg 1	Reg 2	Unit	MW-1	MW-2	MW-3	MW-4	MW-5	DUP-1
Aluminum	100	2,000	ug/L	**882**	**388**	**1,890**	**82,500**	**9,890**	**3,230**
Antimony	3	6	ug/L	ND	ND	ND	ND	**11.0 BN**	**14.8 BN**
Arsenic	25	50	ug/L	ND	ND	ND	**42.7**	9.1 B	ND
Barium	1,000	2,000	ug/L	**1,050**	**7,130**	322	**6,690**	**1,680**	971
Beryllium	11	3	ug/L	ND	ND	ND	**4.0 B**	0.50 B	ND
Cadmium	5	10	ug/L	ND	ND	ND	1.7 B	1.7 B	1.3 B
Calcium	---	---	ug/L	**53,600**	111,000	102,000	142,000	131,000	122,000
Chromium	50	100	ug/L	1.5 B	2.1 B	**3.2 B**	**116**	18.6 B	6.5 B
Cobalt	5	---	ug/L	ND	ND	1.4 B	**74.6**	**12.7 B**	**6.5 B**
Copper	3.4	1,000	ug/L	**5.3 B**	**6.8 B**	7.7 B	**201**	**67.8**	29.2 B
Iron	300	600	ug/L	**12,000**	**2,250**	**3,510**	**167,000**	**19,800**	**6,420**
Lead	8	50	ug/L	ND	ND	ND	**121**	**31.8**	9.7 B
Magnesium	35,000	35,000	ug/L	14,400	32,900	29,500	78,700	**57,200**	**52,100**
Manganese	300	600	ug/L	**1,810**	**841**	**747**	**5,090**	**3,540**	**3,560**
Nickel	100	---	ug/L	1.5 B	5.0 B	3.6 B	**169**	31.0 B	15.4 B
Potassium	---	---	ug/L	5,380	13,100	5,760	21,400	32,600	31,600
Selenium	4.6	20	ug/L	ND	ND	ND	**13.4 B**	ND	**15.2 B**
Sodium	20,000	---	ug/L	7,030	**124,000**	**86,000**	**153,000**	**68,300**	**66,200**
Vanadium	14	---	ug/L	1.4 B	ND	**3.6 B**	**135**	**18.2 B**	6.4 B
Zinc	66	5,000	ug/L	11.6 B	**12.1 B**	10.8 B	**363**	**84.5**	33.8 B
Mercury	0.7	1.4	ug/L	ND	ND	ND	0.10 B	ND	ND
1,1,1-Trichloroethane	5	5	ug/L	ND	**2,500 DJ**	ND	0.53 J	**6,700 DJ**	7,400 DJ
1,1,2-Trichloroethane	1	1	ug/L	**ND**	**7.7**	ND	ND	**8.1**	**6.9**
1,1-Dichloroethane	5	5	ug/L	ND	**3,600 DJ**	ND	**93**	ND	ND
1,1-Dichloroethene	5	5	ug/L	**ND**	**ND**	ND	**15**	ND	ND
1,2,3-Trichlorobenzene	5	---	ug/L	ND	ND	ND	ND	0.78 J	0.75 J
1,2,4-Trichlorobenzene	5	5	ug/L	ND	0.64 J	ND	ND	1.2 J	1.2 J
1,2,4-Trimethylbenzene	5	5	ug/L	ND	**110**	ND	ND	**91**	**110**
1,2-Dichloroethane	0.6	0.6	ug/L	ND	**2.9 J**	ND	ND	**8.0**	**7.2**
1,3,5-Trimethylbenzene	5	5	ug/L	ND	**37**	ND	ND	**26**	**32**
1,4-Dichlorobenzene	3	3	ug/L	ND	ND	ND	ND	0.52 J	0.54 J
4-Isopropyltoluene	5	5	ug/L	ND	ND	ND	ND	ND	**7.4**
4-Methyl-2-pentanone	---	---	ug/L	ND	17	ND	ND	23	22
Acetone	50	50	ug/L	ND	**120**	ND	ND	**130**	**150**
Benzene	1	1	ug/L	ND	**6.2**	ND	ND	**8.2**	**8.4**
Carbon disulfide	---	60	ug/L	ND	0.77 J	ND	ND	3.5 J	4.1 J
Chlorobenzene	5	5	ug/L	**ND**	ND	ND	ND	0.60 J	0.63 J
Chloroethane	5	5	ug/L	ND	1.8 J	ND	ND	ND	1.6 J
Chloroform	7	7	ug/L	ND	3.6 J	ND	ND	3.5 J	3.3 J
cis-1,2-Dichloroethene	5	5	ug/L	0.79 J	**27,000 D**	ND	**8,300 D**	**63,000 D**	**58,000 D**
Ethylbenzene	5	5	ug/L	ND	**27**	ND	ND	**48**	**52**
Isopropylbenzene	5	5	ug/L	**ND**	**7.4**	ND	ND	**6.3**	**7.5**
m,p-Xylene	---	---	ug/L	ND	67	ND	ND	130	140
Methylene chloride	5	5	ug/L	ND	**1,200 DJ**	0.60 J	ND	ND	ND
n-Butylbenzene	5	5	ug/L	ND	**8.2**	ND	ND	**8.6**	**11**
n-Propylbenzene	5	5	ug/L	ND	**13**	ND	ND	**11**	**13**
Naphthalene	10	10	ug/L	ND	**12**	**ND**	ND	**20**	**25**
o-Xylene	---	---	ug/L	ND	39	ND	ND	72	80
sec-Butylbenzene	5	5	ug/L	ND	**6.5**	**ND**	ND	4.0 J	**5.1**
Tetrachloroethene	5	5	ug/L	ND	**3,600 DJ**	ND	3.3 J	**5,100 DJ**	**4,400 DJ**
Toluene	5	5	ug/L	ND	**170**	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	5	ug/L	ND	**110**	ND	**34**	ND	ND
Trichloroethene	5	5	ug/L	0.76 J	**210,000 D**	ND	**230 DJ**	**410,000 D**	**390,000 D**
Vinyl chloride	2	2	ug/L	1.9 J	ND	**ND**	**320 DJ**	**7,500 DJ**	**7,200 DJ**
Xylene (Total)	---	5	ug/L	ND	**110**	ND	ND	**200**	**220**
4-Methylphenol	---	---	ug/L	ND	1.6 J	ND	ND	2.5 J	2.2 J
Bis(2-ethylhexyl)phthalate	0.6	5	ug/L	**1.6 J**	**2.5 J**	**1.6 J**	**1.7 J**	**1.9 J**	**2.0 J**
Butylbenzylphthalate	---	50	ug/L	ND	ND	**ND**	ND	ND	1.4 J
Di-n-butylphthalate	50	50	ug/L	**4.3 J**	**4.4 J**	4.1 J	4.0 J	4.0 J	4.4 J
Diethylphthalate	---	50	ug/L	ND	31	**ND**	ND	1.4 J	1.7 J
Dimethylphthalate	---	50	ug/L	ND	ND	ND	ND	10	10 J
Naphthalene	10	10	ug/L	**ND**	5.7 J	ND	ND	10	10
Phenol	1	2	ug/L	ND	**12**	ND	ND	**5.2 J**	**4.5 J**

Reg 1 NYSDEC TOGs 1.1.1: Water Quality Standards: GA Water Class for Standard Values; Eff. June 1993
Reg 2 NYSDEC TOGs 1.1.1: Water Quality Guidance Values: GA Water Class for Guidance Values; Eff. June 1993
Bold Bold values indicate exceedances relative to Reg1 and/or Reg2.
--- No value provided.
ND No detection.
D Obtained from a secondary dilution analysis.
J Detected below the reporting limit or estimated concentration for Tentatively Identified Compound (TIC).
B Compound was also detected in the associated Method Blank.
N Volatile and Semi-Volatile Organics analysis TIC where an analyte has passed the identification criteria, and is considered to be positively identifed, Inorganics analysis indicates the matrix spike recovery falls outside the control limit.

 S:/Sterling/Projects/2011 Projects/Troy Belting/Lab Reports/2012-12/Groundwater/Trail 2 EDD Water/2013 Groundwater Detection Summary

APPENDIX A

DAILY FIELD REPORTS FOR INSTALLATION OF MONITORING WELLS

STERLING
Sterling Environmental Engineering, P.C.

DAILY FIELD REPORT

Project Name: Troy Belting – Additional Env. Investigation **Project No.:** 2011-31

Client Name: Troy Belting and Supply Company **Date:** December 10, 2012

Location: 70 Cohoes Road, Watervliet, NY 12189 **Weather:** Overcast, 45°F

Inspector: Nathan Shaffer (NS), Sterling Environmental Engineering, P.C.

Work Description, Comments, Discussion, Problems, Instructions:

8:30 AM	NS arrives onsite and discusses locations with RB and MB.
8:50 AM	NS calibrates PID with Isobutylene and zero calibrates to atmosphere.
9:00 AM	Set-up at MW-4 location. Trim trees (one (1) 3" tree and two (2) 1" trees on neighboring-working property). Wait to hear from Dig Safe on gas line location already marked to building. Dig Safe unsure of location of natural gas line that supplies the building.
10:00 AM	Split spoon sampling begins at MW-4 (continuous screening with PID).
10:40 AM	Refusal at 5.5' top of bedrock. Crew rotary drills into bedrock (see Bore Log). Start air hammer at 8.2'.
11:15 AM	CO arrives onsite.
11:30 PM	Break for lunch.
12:00 PM	NS checks with residents on south side of residence to inform them of dust from drilling activities and requests them to close windows per NYSDEC recommendations.
12:40 P.M	Air rotary hammer plugged with fine rock fragments.
1:10 PM	CO leaves site and requests call on his cell to confirm schedule for next day.
2:00 PM	Drill rig slides off blocking and attempts to re-adjust position over well hole and is unsuccessful due to slope of ground and moisture content of mud.
2:50 PM	Inform JS truck will be parked overnight. Driller to resume on December 11, 2012 with mats for tires.
3:00 PM	NS leaves site. Driller to unplug air hammer at maintenance shop.

Visitors (Name, Affiliation): Roger Buley (RB) and Marty Bachner (MB) (Aquifer Drilling Technologies, Inc.), Christopher O'Neil (CO) (NYSDEC), Jason Smith (JS) (Troy Belting & Supply Company)

Signature:

STERLING
Sterling Environmental Engineering, P.C.

DAILY FIELD REPORT

Project Name: Troy Belting – Additional Env. Investigation **Project No.:** 2011-31

Client Name: Troy Belting and Supply Company **Date:** December 11, 2012

Location: 70 Cohoes Road, Watervliet, NY 12189 **Weather:** Partly Cloudy, 39° F

Inspector: Nathan Shaffer (NS), Sterling Environmental Engineering, P.C.

Work Description, Comments, Discussion, Problems, Instructions:

7:40 AM	NS arrives onsite. RB and MB reposition rig over MW-4 on mats.
8:20 AM	Drilling resumes with roller bit as top portion of shale is likely too fractured to obtain a good seal for the air hammer. Air blows around the outside of the auger casing collapsing the sides of the hole.
9:00 AM	Reach 18' below ground surface (bgs). Remove drill. Prepare screen (see well log provided in Figures 2 and 3 for screen and fill details).
9:10 AM	Set well and backfill with filter sand, bentonite seal and concrete grout.
10:00 AM	Set curb box with concrete.
10:10 AM	Check air filter on compressor to ensure no contamination is forced down the hole from the motor of the compressor - @ 75%.
11:00 AM	Calibrate PID (zero to atmosphere, span calibrate to Isobutylene).
11:15 AM	Set-up over MW-5 location.
11:20 AM	Begin split spoon sampling and obtain samples continuously monitoring with the PID.
11:50 AM	Split spoon refusal @ 5.5' bgs.
12:00 PM	Break for lunch.
12:30 PM	Start rock drilling with 3 7/8" air roller bit.
1:00 PM	Reach 18.5' (see well log provided in Figure 3 for screen and fill details).
1:10 PM	Remove equipment, set well and place curb box.
1:15 PM	CO arrives onsite.
2:30 PM	Decontaminate equipment and cleanup around MW-5.
2:45 PM	CO leaves site.
3:15 PM	NJ, RB and MB leave site.

Visitors (Name, Affiliation): Roger Buley (RB) and Marty Bachner (MB) (Aquifer Drilling Technologies, Inc.), Christopher O'Neil (CO) (NYSDEC)

Signature:

APPENDIX B

SOIL BORING LOGS

Sterling Environmental Engineering, P.C.

BORING LOG

Boring No. MW-4

Project Name:	Troy Belting – Additional Environmental Investigation	**Project No.:**	2011-31
Client Name:	Troy Belting & Supply Company	**Date:**	12/10/2012
Location:	70 Cohoes Road, Watervliet, NY 12189	**Logged By:**	NJS
Weather/Temp.:	Overcast, Breezy, 45°F	**Checked By:**	RLA
Drilling Co.:	Aquifer Drilling & Testing, Inc. (ADT)	**Depth:**	5.5 ft (from grade)
Driller:	Roger Buley, Marty Bachner (Assistant)	**Equipment:**	2' length 2" I.D. Split Spoon Sampler
Date Started:	12/10/2012	**Surface Elev.:**	30.82'
Date Completed:	12/11/2012	**Depth to Water from TOC (12/20/12):**	5.52'

Depth (ft.)	Sample No.	Blow Counts/6"	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	COMMENTS PID = background/headspace (ppm)
2	A	(0-2') 6 7 12 7	0-0.25' dark brown TOPSOIL, sand with silt, trace roots (moist) 0.25-1' dark brown silt and sand, trace roots, (moist)	Drilled Interval 0-2' - 12" recovery (rec.) No odor. PID – 0.0/0.6
4	B	(2-4') 8 50/3	2-2.33' dark brown sand with gravel, trace angular shale fragments, up to 1" diameter (moist)	2-4' – 4" rec. No odor. PID – 0.0/0.0
5.5		50/5		4-5.5' – no rec.
			Refusal at 5.5' – (see Figure 2 Well Construction Detail).	Crew advances 3 7/8" diameter air rotary hammer bit into rock 5.5'-8', Switches drill head and air rotary roller bit into bedrock to a depth of 18', No soil sample collected. See Figure 2 for a description of the well construction in the Well Construction Detail.

Sterling Environmental Engineering, P.C.

BORING LOG

Boring No. MW-5

Project Name:	Troy Belting – Additional Environmental Investigation	**Project No.:**	2011-31
Client Name:	Troy Belting & Supply Company	**Date:**	12/11/2012
Location:	70 Cohoes Road, Watervliet, NY 12189	**Logged By:**	NJS
Weather/Temp.:	Sunny, 38°F	**Checked By:**	RLA
Drilling Co.:	Aquifer Drilling & Testing, Inc. (ADT)	**Depth:**	5.5 ft (from grade)
Driller:	Roger Buley, Marty Bachner (Assistant)	**Equipment:**	2' length 2" I.D. Split Spoon Sampler
Date Started:	12/11/2012	**Surface Elev.:**	33.69'
Date Completed:	12/11/2012	**Depth to Water from TOC (12/20/12):**	4.0'

Depth (ft.)	Sample No.	Blow Counts/6"	DESCRIPTIVE LOG (color, grain size and amount, texture, moisture)	COMMENTS PID = background/headspace (ppm)
2	A	(0-2') 6 6 6 6	0-0.25' dark brown TOPSOIL, sand with silt, trace roots (moist) 0.25-2' dark brown silt and clay, with gravel, trace roots, (moist)	Drilled Interval 0-2' - 15" recovery (rec.) No odor. PID – 0.4/0.4
4	B	(2-4') 4 5 5 5	2-5.5' grey clay and silt, trace roots, (moist)	2-4' – 9" rec. Solvent Odor. PID – 0.1/246.0
5.5	C	(4-5.5') 5 50/4	Sample MW5-S01, VOC viles were filled with soil from sample B then sample B was compiled with sample C and the rest of the sample jars were filled.	4-5.5' – 10" rec. Solvent Odor. PID - 0.4/225.0
			Refusal at 5.5' – (see Figure 3 Well Construction Detail).	Crew advances 3 7/8" diameter air rotary roller bit into bedrock to a depth of 18' No soil sample collected. See Figure 3 for a description of the well construction in the Well Construction Detail.

APPENDIX C

DAILY FIELD REPORTS FOR GROUNDWATER QUALITY MONITORING

STERLING
Sterling Environmental Engineering, P.C.

DAILY FIELD REPORT

Project Name: Troy Belting – Additional Env. Investigation **Project No.:** 2011-31

Client Name: Troy Belting & Supply Company **Date:** December 13, 2012

Location: 70 Cohoes Road, Watervliet, NY 12189 **Weather:** Clear, 37° F

Inspector: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Work Description, Comments, Discussion, Problems, Instructions: develop two (2) monitoring wells.

12:00 PM CV arrives onsite.

12:30 PM CV starts to purge MW-5 using a peristaltic pump.

Volume Purged (gallons)	Turbidity (NTU)
0.25	19.3
0.5	24.3
1	17.2
1.1	17.3
1.2	14.9

1:00 PM CV starts to purge MW-4 using a peristaltic pump.

Volume Purged (gallons)	Turbidity (NTU)
0.1	193
0.75	1,096
2	9,702
3	2,475
4	396
4.5	Purged Dry

1:45 PM CV disposes all purged water into onsite 55 gallon drum for disposal.

2:15 PM CV leaves site.

Visitors (Name, Affiliation): _____

Signature: Charlotte Verhoef

STERLING
Sterling Environmental Engineering, P.C.

DAILY FIELD REPORT

Project Name: Troy Belting – Additional Env. Investigation **Project No.:** 2011-31

Client Name: Troy Belting & Supply Company **Date:** December 20, 2012

Location: 70 Cohoes Road Watervliet, NY, 12189 **Weather:** Clear, 37° F

Inspector: Charlotte Verhoef (CV) and Cody Sargood (CS) , Sterling Environmental Engineering, P.C.

Work Description, Comments, Discussion, Problems, Instructions: sample five (5) monitoring wells using low flow methodology technique.

9:10 AM	CV and CS arrive onsite.
9:15 AM	CV and CS sample MW-4 prior to low flow technique to make sure a sample is obtained in case well is slow to recharge.
9:50 AM	CV and CS start to purge MW-4 with a peristaltic pump using low flow sampling technique.
10:20 AM	CV and CS sample MW-4. Previous sample of MW-4 disposed of properly in specified drums onsite.
11:35 AM	CV and CS start to purge MW-3 with a peristaltic pump using low flow technique.
11:55 AM	CV and CS sample MW-3.
12:40 PM	CV and CS start to purge MW-5 with a peristaltic pump using low flow sampling technique.
1:00 PM	CV and CS sample MW-5.
1:30 PM	CV and CS sample the DUP-1, MS, and MSD from MW-5 location.
2:00 PM	CV and CS start to purge MW-2 with a peristaltic pump using low flow technique.
2:20 PM	CV and CS sample MW-2.
2:50 PM	CV and CS start to purge MW-1 with a peristaltic pump using low flow technique.
3:10 PM	CV and CS sample MW-1.
3:15 PM	CV and CS dispose all purged water into onsite 55 gallon drum for disposal.
3:35 PM	CV and CS leave site.

Visitors (Name, Affiliation): _____

Signature: Charlotte Verhoef

APPENDIX D

MONITORING WELL SURVEY

CORNERSTONE
SURVEYING & MAPPING

December 17, 2012

Troy Belting & Supply Company, Inc.
70 Cohoes Road
Watervliet, NY 12189

Attention: David Barcomb

MONITORING WELL ELEVATIONS

Well No.	Well Elevation / Top Casing Elevation	Location
4	30.82' / 30.63'	In wooded area near north edge of property
5	33.69' / 33.49'	Near south edge of parking lot north of bldg.

The elevations were determined from transferring elevations from a United States Coast and Geodetic Survey Disk located on Arch Street in Green Island and are referenced to the National Geodetic Vertical Datum of 1929.

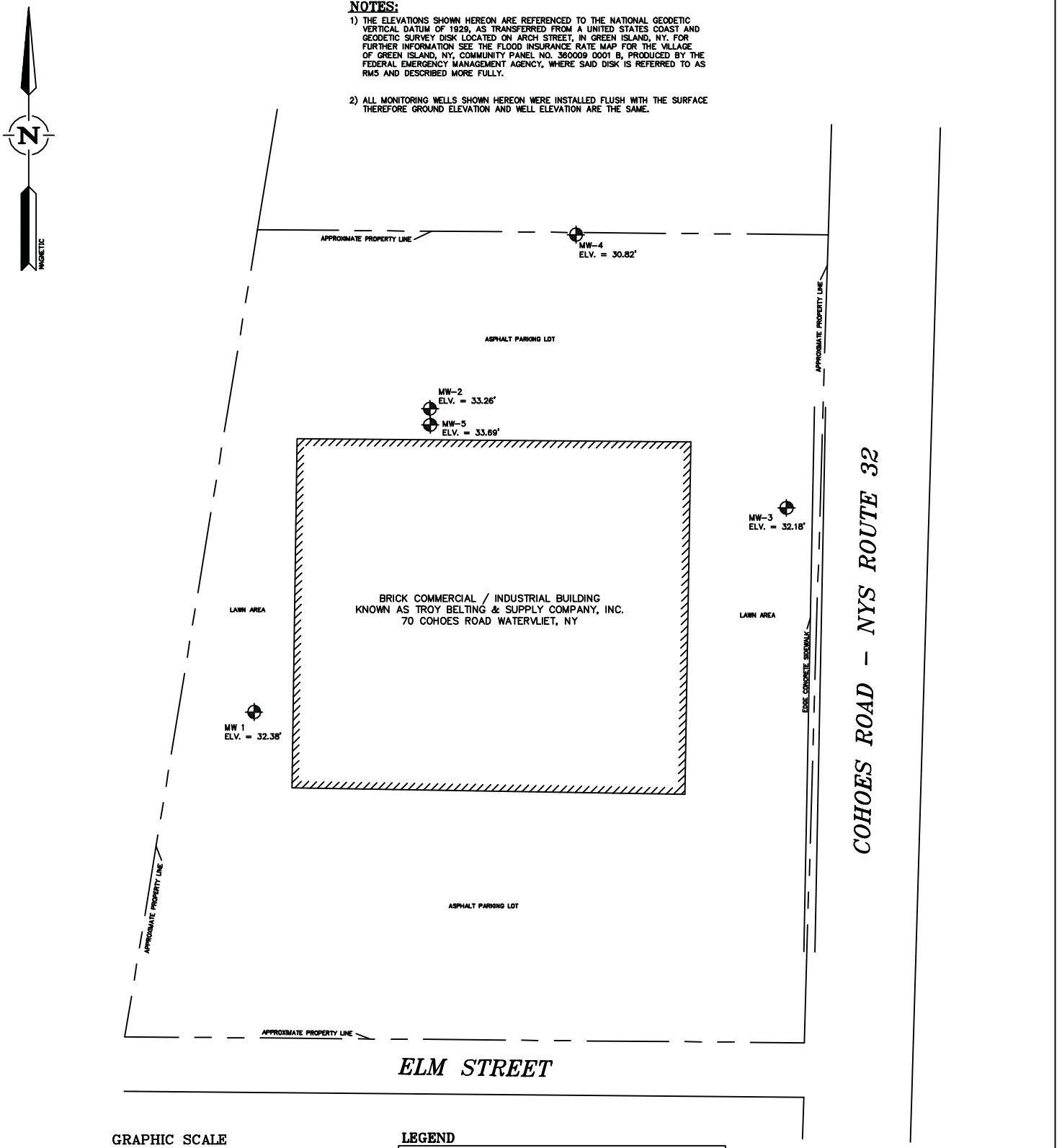
Herman Pulcher, LS

189 NORTH LAKE AVENUE TROY, NY 12180 (518) 326-2585

NOTES:

1) THE ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929, AS TRANSFERRED FROM A UNITED STATES COAST AND GEODETIC SURVEY DISK LOCATED ON ARCH STREET, IN GREEN ISLAND, NY. FOR FURTHER INFORMATION SEE THE FLOOD INSURANCE RATE MAP FOR THE VILLAGE OF GREEN ISLAND, NY, COMMUNITY PANEL NO. 360009 0001 B, PRODUCED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, WHERE SAID DISK IS REFERRED TO AS RM5 AND DESCRIBED MORE FULLY.

2) ALL MONITORING WELLS SHOWN HEREON WERE INSTALLED FLUSH WITH THE SURFACE THEREFORE GROUND ELEVATION AND WELL ELEVATION ARE THE SAME.



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

MW 1 ⊕	MONITORING WELL LOCATED
ELV. = 32.38'	ELEVATION IN FEET ABOVE SEA LEVEL (SEE NOTES)

CORNERSTONE
SURVEYING & MAPPING
189 NORTH LAKE AVENUE (518) 326-2585
TROY, NY 12180

HERMAN PULCHER, LS
NY LIC. NO. 050377

NO.	DATE	REVISION	BY

MONITORING WELL SURVEY

TROY BELTING & SUPPLY COMPANY, INC.
70 COHOES ROAD WATERVLIET, NY

TAX MAP NO. 20.20-1-4 — TOWN OF COLONIE
ALBANY COUNTY — STATE OF NEW YORK

DATE: DECEMBER 17, 2012 — SCALE: 1' = 30'
CAD FILE: TBS2 — JOB NO. 12-011A — SHEET 1 OF 1

REDUCED COPY - NOT TO SCALE

APPENDIX E

LOW FLOW SAMPLING DATA SHEETS

Low Flow Purging / Sampling Data Sheet

Project: Troy Belting
Site: Troy Belting
Well No.: MW-1
Date: 12/20/12

Well Depth: 18.23'
Screen Length: 8.23 – 18.23'
Well Diameter: 2"
Casing Type: 2" PVC Casing

Sampling Device: Peristaltic Pump
Tubing Type: HDPE ¼" OD x 3/16" ID
Static Water Level: 2.50' from TOC
Measuring Point: 15 - 17'

Sampling Personnel: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (1) (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
2:55	0.30	3.4	0.9	7.00	11.59	0.413	-48.8	2.31	34.4
2:58	0.30	4.10	1.6	6.89	12.35	0.410	-40.5	0.70	55.6
3:01	0.30	4.55	2.05	6.86	12.53	0.409	-37.8	0.54	14.7
3:04	0.30	4.90	2.4	6.85	12.56	0.408	-34.5	0.45	79.4
3:07	0.30	5.10	2.6	6.83	12.60	0.406	-36.7	0.41	45.0
3:10	0.30	5.30	2.8	6.80	12.62	0.406	-42.3	0.40	40.8
3:13	0.30	5.50	3	6.76	12.65	0.442	-47.9	0.39	37.0

Low Flow Purging / Sampling Data Sheet

Project: Troy Belting
Well No.: MW-2
Site: Troy Belting
Date: 12/20/12

Well Depth: 19.00'
Well Diameter: 2"
Screen Length: 9 – 19'
Casing Type: 2" PVC Casing

Sampling Device: Peristaltic Pump
Static Water Level: 3.33' from TOC
Tubing Type: HDPE ¼" OD x 3/16" ID
Measuring Point: 16 - 18'

Sampling Personnel: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (1) (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
2:00	0.32	7.19	3.86	6.84	14.23	1.379	-43.2	0.68	14.8
2:03	0.32	8.30	4.97	6.84	13.94	1.380	-46.5	0.60	4.01
2:06	0.32	9.50	6.17	6.83	13.86	1.380	-47.1	0.57	5.48
2:09	0.31	10.5	7.17	6.82	13.78	1.378	-46.2	0.57	5.01
2:12	0.31	11.4	8.07	6.81	13.86	1.379	-45.0	0.56	14.7
2:15	0.31	12.4	9.07	6.82	14.12	1.382	-43.7	0.54	15.4
2:18	0.31	13.2	9.87	6.82	14.52	1.370	-48.1	0.53	16.1

Low Flow Purging / Sampling Data Sheet

Project: Troy Belting
Site: Troy Belting
Well No.: MW-3
Date: 12/20/12

Well Depth: 16.65'
Screen Length: 6.65 – 16.65'
Well Diameter: 2"
Casing Type: 2" PVC Casing

Sampling Device: Peristaltic Pump
Tubing Type: HDPE ¼" OD x 3/16" ID
Static Water Level: 7.45' from TOC
Measuring Point: 13 - 16'

Sampling Personnel: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm^{c}) (± 3%)	ORP (mV) (± 10)	DO (1) (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
11:36	0.296	8.7	1.25	7.03	13.85	1.136	30.6	2.97	20.5
11:39	0.298	9.25	1.8	7.02	13.98	1.135	27.0	2.16	11.5
11:42	0.30	9.93	2.48	7.02	14.03	1.131	19.7	1.07	7.44
11:45	0.30	10.60	3.15	7.01	14.03	1.126	6.2	0.52	6.91
11:48	0.30	11.25	3.8	7.01	14.11	1.101	-3.8	0.51	7.20
11:51	0.296	12.05	4.6	7.00	14.03	1.112	-8.7	0.51	8.01

Low Flow Purging / Sampling Data Sheet

Project: Troy Belting
Site: Troy Belting
Well No.: MW-4
Date: 12/20/12

Well Depth: 18'
Screen Length: 18.83'-7.83'
Well Diameter: 2"
Casing Type: 2" PVC Casing

Sampling Device: Peristaltic Pump
Tubing Type: HDPE ¼" OD x 3/16" ID
Static Water Level: 5.52' from TOC
Measuring Point: 13'-16'

Sampling Personnel: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm^c) (± 3%)	ORP (mV) (± 10)	DO (1) (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
9:50	0.30	7.20	1.68	7.04	11.59	1.333	128.1	3.94	2081
9:53	0.296	7.95	2.43	6.97	11.76	1.351	110.1	2.90	407
9:56	0.296	8.55	3.03	6.95	11.52	1.357	77.6	1.96	359
9:59	0.296	9.2	3.68	6.95	11.58	1.356	45.3	1.24	408
10:02	0.296	9.65	4.13	7.10	12.37	1.276	25.5	1.06	397
10:05	0.296	10.20	4.68	7.03	12.04	1.332	25.0	0.95	Err4
10:08	0.296	10.75	5.23	6.95	11.90	1.347	3.40	1.01	Err4
10:11	0.296	11.25	5.73	6.92	11.97	1.353	-13.2	6.87	Err4
10:14	0.298	11.85	6.33	6.93	11.87	1.350	-24.5	6.93	4843
10:17	0.30	12.4	6.88	6.93	11.97	1.356	-30.0	6.63	Err4
10:20	0.30	12.95	7.43	6.96	11.90	1.350	-34.6	6.97	3777

Low Flow Purging / Sampling Data Sheet

Project: Troy Belting
Site: Troy Belting
Well No.: MW-5
Date: 12/20/12

Well Depth: 18.5"
Screen Length: 18.33'-8.33'
Well Diameter: 2"
Casing Type: 2" PVC Casing

Sampling Device: Peristaltic Pump
Tubing Type: HDPE ¼" OD x 3/16" ID
Static Water Level: 4' from TOC
Measuring Point: 14'-17'

Sampling Personnel: Charlotte Verhoef (CV), Sterling Environmental Engineering, P.C.

Time	Pump Rate (L/min.)	Depth to Water (ft.)	Drawdown (< 0.1m)	pH (± 0.1)	Temp. (°C) (± 3%)	SC (mS/cm°) (± 3%)	ORP (mV) (± 10)	DO (1) (mg/L) (± 10%)	Turbidity (nTu)(± 10%)
12:38	0.30	6.8	2.8	6.73	14.49	1.329	61.6	5.33	330
12:41	0.30	8	4	6.73	14.38	1.329	61.3	5.32	66.7
12:44	0.30	8.85	4.85	6.72	14.38	1.329	60.9	5.18	24.2
12:47	0.30	8.95	4.95	6.72	14.23	1.332	60.8	5.15	19.8
12:50	0.30	9	5	6.72	14.40	1.333	59.0	5.15	15.5
12:53	0.30	9.05	5.05	6.72	14.28	1.334	57.9	5.05	14.2
12:56	0.30	9.10	5.1	6.71	14.37	1.339	57.1	5.07	14.3

APPENDIX F

LABORATORY REPORTS

(PROVIDED ON CD)

Report Date:
02-Jan-13 15:54

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sterling Environmental Engineering P.C.
24 Wade Road
Latham, NY 12110

Work Order: L2554
Project : Troy Belting, Cohoes
Project #:

Attn: Rodney Aldrich

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2554-01	SO1-MW5	Soil	11-Dec-12 11:20	12-Dec-12 10:54
L2554-02	DUP1	Soil	11-Dec-12 11:20	12-Dec-12 10:54

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.
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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 : Troy Belting, Cohoes **SDG :** L2554

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
SO1-MW5	L2554-01	SW8260_MED_S	SW8270_S		SW6010_S	
SO1-MW5	L2554-01				SW7471	
DUP1	L2554-02	SW8260_MED_S	SW8270_S		SW6010_S	
DUP1	L2554-02				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 : Troy Belting, Cohoes **SDG :** L2554

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_MED_S					
L2554-01D	SL	12/11/2012	12/12/2012	12/18/2012	12/18/2012
L2554-01DMS	SL	12/11/2012	12/12/2012	12/18/2012	12/19/2012
L2554-01DMSD	SL	12/11/2012	12/12/2012	12/18/2012	12/19/2012
L2554-02D	SL	12/11/2012	12/12/2012	12/18/2012	12/18/2012
L2554-02DDL	SL	12/11/2012	12/12/2012	12/18/2012	12/19/2012

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

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

Project Name : Troy Belting, Cohoes **SDG :** L2554

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_S					
L2554-01A	SL	12/11/2012	12/12/2012	12/12/2012	12/13/2012
L2554-01ADL	SL	12/11/2012	12/12/2012	12/12/2012	12/14/2012
L2554-01AMS	SL	12/11/2012	12/12/2012	12/12/2012	12/13/2012
L2554-01AMSD	SL	12/11/2012	12/12/2012	12/12/2012	12/13/2012
L2554-02A	SL	12/11/2012	12/12/2012	12/12/2012	12/13/2012

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

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

Project Name : Troy Belting, Cohoes **SDG :** L2554

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_MED_S					
L2554-01D	SL	SW8260_MED_S	Methanol	MED	1
L2554-01DMS	SL	SW8260_MED_S	Methanol	MED	1
L2554-01DMSD	SL	SW8260_MED_S	Methanol	MED	1
L2554-02D	SL	SW8260_MED_S	Methanol	MED	1
L2554-02DDL	SL	SW8260_MED_S	Methanol	MED	2

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

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

Project Name : Troy Belting, Cohoes **SDG :** L2554

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_S					
L2554-01A	SL	SW8270_S	3550B	NA	1
L2554-01ADL	SL	SW8270_S	3550B	NA	2
L2554-01AMS	SL	SW8270_S	3550B	NA	1
L2554-01AMSD	SL	SW8270_S	3550B	NA	1
L2554-02A	SL	SW8270_S	3550B	NA	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 : Troy Belting, Cohoes **SDG :** L2554

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_S				
L2554-01B	SL	SW6010_S	12/12/2012	12/14/2012
L2554-01BDUP	SL	SW6010_S	12/12/2012	12/14/2012
L2554-01BMS	SL	SW6010_S	12/12/2012	12/14/2012
L2554-02B	SL	SW6010_S	12/12/2012	12/14/2012
SW7471				
L2554-01B	SL	SW7471	12/12/2012	12/18/2012
L2554-01BDUP	SL	SW7471	12/12/2012	12/18/2012
L2554-01BMS	SL	SW7471	12/12/2012	12/18/2012
L2554-02B	SL	SW7471	12/12/2012	12/18/2012

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

WorkOrder: L2554

Client ID: STERLING
Project: Troy Belting, Cohoes
WO Name: Troy Belting, Cohoes
Location: STERLING_TROY,
Comments: N/A

Case:
SDG:
PO: 2011-31

HC Due: 12/31/12
Fax Due: 12/14/12
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: 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
L2554-01A	SO1-MW5	12/11/2012 11:20	12/12/2012	Soil	PMoist	/			Y		A2
L2554-01A	SO1-MW5	12/11/2012 11:20	12/12/2012	Soil	SW8270_S	/			Y		A2
L2554-01B	SO1-MW5	12/11/2012 11:20	12/12/2012	Soil	SW6010_S	/ TAL			Y	Y	A2
L2554-01B	SO1-MW5	12/11/2012 11:20	12/12/2012	Soil	SW7471	/ TAL			Y		A2
L2554-01C	SO1-MW5	12/11/2012 11:20	12/12/2012	Soil	SW8260_LOW_S	/		Y	Y		VOA
L2554-01D	SO1-MW5	12/11/2012 11:20	12/12/2012	Soil	SW8260_MED_S	/			Y		VOA
L2554-02A	DUP1	12/11/2012 11:20	12/12/2012	Soil	PMoist	/					A2
L2554-02A	DUP1	12/11/2012 11:20	12/12/2012	Soil	SW8270_S	/					A2
L2554-02B	DUP1	12/11/2012 11:20	12/12/2012	Soil	SW6010_S	/ TAL				Y	A2
L2554-02B	DUP1	12/11/2012 11:20	12/12/2012	Soil	SW7471	/ TAL					A2
L2554-02C	DUP1	12/11/2012 11:20	12/12/2012	Soil	SW8260_LOW_S	/		Y			VOA
L2554-02D	DUP1	12/11/2012 11:20	12/12/2012	Soil	SW8260_MED_S	/					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 : Sterling Environmental Engineering P.C.

Project: Troy Belting, Cohoes

Laboratory Workorder / SDG #: L2554

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.

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

Matrix spikes were performed on samples: SO1-MW5 (L2554-01DMS) and SO1-MW5 (L2554-01DMSD).

Percent recoveries were within the QC limits with the following exceptions:

SO1-MW5 (L2554-01DMS)Percent Recovery is outside QC Limits, recovery is below criteria for 2,2-Dichloropropane at 64% with criteria of (65-135), Bromomethane at 9% with criteria of (30-160), Iodomethane at 46% with criteria of (70-126), Tetrachloroethene at 3% with criteria of (65-140) and Trichloroethene at 65% with criteria of (75-125).

SO1-MW5 (L2554-01DMSD)Percent Recovery is outside QC Limits, recovery is above criteria for 1,2,4-Trimethylbenzene at 144% with criteria of (65-135), cis-1,2-Dichloroethene at 144% with criteria of (65-125), n-Butylbenzene at 140% with criteria of (65-140), recovery is below criteria for Bromomethane at 11% with criteria of (30-160), Iodomethane at 66% with criteria of (70-126) and Tetrachloroethene at 13% with criteria of (65-140).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

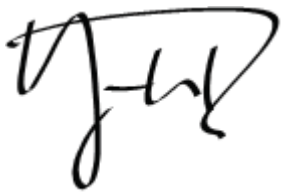
The following samples were analyzed at dilution:

DUP1 (L2554-02DDL) : Dilution Factor: 2

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:_____12/30/2012_____

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

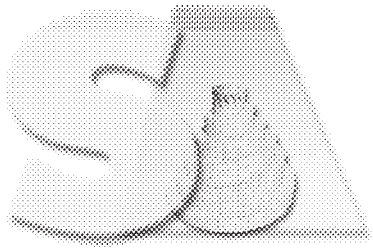
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO1-MW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01D

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V1M9740.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	310	U
74-87-3	Chloromethane	310	U
75-01-4	Vinyl chloride	610	
74-83-9	Bromomethane	310	U
75-00-3	Chloroethane	310	U
75-69-4	Trichlorofluoromethane	310	U
75-35-4	1,1-Dichloroethene	310	U
67-64-1	Acetone	310	U
74-88-4	Iodomethane	310	U
75-15-0	Carbon disulfide	310	U
75-09-2	Methylene chloride	310	U
156-60-5	trans-1,2-Dichloroethene	150	J
1634-04-4	Methyl tert-butyl ether	310	U
75-34-3	1,1-Dichloroethane	310	U
108-05-4	Vinyl acetate	310	U
78-93-3	2-Butanone	310	U
156-59-2	cis-1,2-Dichloroethene	7100	
594-20-7	2,2-Dichloropropane	310	U
74-97-5	Bromochloromethane	310	U
67-66-3	Chloroform	310	U
71-55-6	1,1,1-Trichloroethane	310	U
563-58-6	1,1-Dichloropropene	310	U
56-23-5	Carbon tetrachloride	310	U
107-06-2	1,2-Dichloroethane	310	U
71-43-2	Benzene	310	U
79-01-6	Trichloroethene	1500	
78-87-5	1,2-Dichloropropane	310	U
74-95-3	Dibromomethane	310	U
75-27-4	Bromodichloromethane	310	U
10061-01-5	cis-1,3-Dichloropropene	310	U
108-10-1	4-Methyl-2-pentanone	310	U
108-88-3	Toluene	180	J
10061-02-6	trans-1,3-Dichloropropene	310	U
79-00-5	1,1,2-Trichloroethane	310	U
142-28-9	1,3-Dichloropropane	310	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO1-MW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01D

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V1M9740.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	5100	
591-78-6	2-Hexanone	310	U
124-48-1	Dibromochloromethane	310	U
106-93-4	1,2-Dibromoethane	310	U
108-90-7	Chlorobenzene	310	U
630-20-6	1,1,1,2-Tetrachloroethane	310	U
100-41-4	Ethylbenzene	360	
179601-23-1	m,p-Xylene	990	
95-47-6	o-Xylene	540	
1330-20-7	Xylene (Total)	1500	
100-42-5	Styrene	310	U
75-25-2	Bromoform	310	U
98-82-8	Isopropylbenzene	320	
79-34-5	1,1,2,2-Tetrachloroethane	310	U
108-86-1	Bromobenzene	310	U
96-18-4	1,2,3-Trichloropropane	310	U
103-65-1	n-Propylbenzene	750	
95-49-8	2-Chlorotoluene	310	U
108-67-8	1,3,5-Trimethylbenzene	2800	
106-43-4	4-Chlorotoluene	310	U
98-06-6	tert-Butylbenzene	310	U
95-63-6	1,2,4-Trimethylbenzene	6800	
135-98-8	sec-Butylbenzene	1200	
99-87-6	4-Isopropyltoluene	1500	
541-73-1	1,3-Dichlorobenzene	310	U
106-46-7	1,4-Dichlorobenzene	310	U
104-51-8	n-Butylbenzene	3200	
95-50-1	1,2-Dichlorobenzene	310	U
96-12-8	1,2-Dibromo-3-chloropropane	310	U
120-82-1	1,2,4-Trichlorobenzene	310	U
87-68-3	Hexachlorobutadiene	310	U
87-61-6	1,2,3-Trichlorobenzene	310	U
91-20-3	Naphthalene	880	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SO1-MW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01D

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V1M9740.D

Level: (TRACE or LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (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.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02D

Sample wt/vol: 8.00 (g/mL) G Lab File ID: V1M9741.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 24 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	280	U
74-87-3	Chloromethane	280	U
75-01-4	Vinyl chloride	920	
74-83-9	Bromomethane	280	U
75-00-3	Chloroethane	280	U
75-69-4	Trichlorofluoromethane	280	U
75-35-4	1,1-Dichloroethene	280	U
67-64-1	Acetone	280	U
74-88-4	Iodomethane	280	U
75-15-0	Carbon disulfide	280	U
75-09-2	Methylene chloride	280	U
156-60-5	trans-1,2-Dichloroethene	210	J
1634-04-4	Methyl tert-butyl ether	280	U
75-34-3	1,1-Dichloroethane	280	U
108-05-4	Vinyl acetate	280	U
78-93-3	2-Butanone	280	U
156-59-2	cis-1,2-Dichloroethene	13000	E
594-20-7	2,2-Dichloropropane	280	U
74-97-5	Bromochloromethane	280	U
67-66-3	Chloroform	280	U
71-55-6	1,1,1-Trichloroethane	280	U
563-58-6	1,1-Dichloropropene	280	U
56-23-5	Carbon tetrachloride	280	U
107-06-2	1,2-Dichloroethane	280	U
71-43-2	Benzene	280	U
79-01-6	Trichloroethene	560	
78-87-5	1,2-Dichloropropane	280	U
74-95-3	Dibromomethane	280	U
75-27-4	Bromodichloromethane	280	U
10061-01-5	cis-1,3-Dichloropropene	280	U
108-10-1	4-Methyl-2-pentanone	280	U
108-88-3	Toluene	310	
10061-02-6	trans-1,3-Dichloropropene	280	U
79-00-5	1,1,2-Trichloroethane	280	U
142-28-9	1,3-Dichloropropane	280	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02D

Sample wt/vol: 8.00 (g/mL) G Lab File ID: V1M9741.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 24 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	2100	
591-78-6	2-Hexanone	280	U
124-48-1	Dibromochloromethane	280	U
106-93-4	1,2-Dibromoethane	280	U
108-90-7	Chlorobenzene	280	U
630-20-6	1,1,1,2-Tetrachloroethane	280	U
100-41-4	Ethylbenzene	560	
179601-23-1	m,p-Xylene	1500	
95-47-6	o-Xylene	820	
1330-20-7	Xylene (Total)	2300	
100-42-5	Styrene	280	U
75-25-2	Bromoform	280	U
98-82-8	Isopropylbenzene	440	
79-34-5	1,1,2,2-Tetrachloroethane	280	U
108-86-1	Bromobenzene	280	U
96-18-4	1,2,3-Trichloropropane	280	U
103-65-1	n-Propylbenzene	1000	
95-49-8	2-Chlorotoluene	280	U
108-67-8	1,3,5-Trimethylbenzene	3500	
106-43-4	4-Chlorotoluene	280	U
98-06-6	tert-Butylbenzene	280	U
95-63-6	1,2,4-Trimethylbenzene	8800	
135-98-8	sec-Butylbenzene	1300	
99-87-6	4-Isopropyltoluene	280	U
541-73-1	1,3-Dichlorobenzene	280	U
106-46-7	1,4-Dichlorobenzene	280	U
104-51-8	n-Butylbenzene	3300	
95-50-1	1,2-Dichlorobenzene	280	U
96-12-8	1,2-Dibromo-3-chloropropane	280	U
120-82-1	1,2,4-Trichlorobenzene	280	U
87-68-3	Hexachlorobutadiene	280	U
87-61-6	1,2,3-Trichlorobenzene	280	U
91-20-3	Naphthalene	850	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02D

Sample wt/vol: 8.00 (g/mL) G Lab File ID: V1M9741.D

Level: (TRACE or LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 24 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (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.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02DDL

Sample wt/vol: 8.00 (g/mL) G Lab File ID: V8B7089.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 24 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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
75-71-8	Dichlorodifluoromethane	570	U
74-87-3	Chloromethane	570	U
75-01-4	Vinyl chloride	780	D
74-83-9	Bromomethane	570	U
75-00-3	Chloroethane	570	U
75-69-4	Trichlorofluoromethane	570	U
75-35-4	1,1-Dichloroethene	570	U
67-64-1	Acetone	570	U
74-88-4	Iodomethane	570	U
75-15-0	Carbon disulfide	570	U
75-09-2	Methylene chloride	570	U
156-60-5	trans-1,2-Dichloroethene	210	DJ
1634-04-4	Methyl tert-butyl ether	570	U
75-34-3	1,1-Dichloroethane	570	U
108-05-4	Vinyl acetate	570	U
78-93-3	2-Butanone	570	U
156-59-2	cis-1,2-Dichloroethene	12000	D
594-20-7	2,2-Dichloropropane	570	U
74-97-5	Bromochloromethane	570	U
67-66-3	Chloroform	570	U
71-55-6	1,1,1-Trichloroethane	570	U
563-58-6	1,1-Dichloropropene	570	U
56-23-5	Carbon tetrachloride	570	U
107-06-2	1,2-Dichloroethane	570	U
71-43-2	Benzene	570	U
79-01-6	Trichloroethene	580	D
78-87-5	1,2-Dichloropropane	570	U
74-95-3	Dibromomethane	570	U
75-27-4	Bromodichloromethane	570	U
10061-01-5	cis-1,3-Dichloropropene	570	U
108-10-1	4-Methyl-2-pentanone	570	U
108-88-3	Toluene	270	DJ
10061-02-6	trans-1,3-Dichloropropene	570	U
79-00-5	1,1,2-Trichloroethane	570	U
142-28-9	1,3-Dichloropropane	570	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02DDL

Sample wt/vol: 8.00 (g/mL) G Lab File ID: V8B7089.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 24 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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
127-18-4	Tetrachloroethene	2100	D
591-78-6	2-Hexanone	570	U
124-48-1	Dibromochloromethane	570	U
106-93-4	1,2-Dibromoethane	570	U
108-90-7	Chlorobenzene	570	U
630-20-6	1,1,1,2-Tetrachloroethane	570	U
100-41-4	Ethylbenzene	440	DJ
179601-23-1	m,p-Xylene	1300	D
95-47-6	o-Xylene	730	D
1330-20-7	Xylene (Total)	2000	D
100-42-5	Styrene	570	U
75-25-2	Bromoform	570	U
98-82-8	Isopropylbenzene	380	DJ
79-34-5	1,1,2,2-Tetrachloroethane	570	U
108-86-1	Bromobenzene	570	U
96-18-4	1,2,3-Trichloropropane	570	U
103-65-1	n-Propylbenzene	890	D
95-49-8	2-Chlorotoluene	570	U
108-67-8	1,3,5-Trimethylbenzene	2900	D
106-43-4	4-Chlorotoluene	570	U
98-06-6	tert-Butylbenzene	570	U
95-63-6	1,2,4-Trimethylbenzene	7700	D
135-98-8	sec-Butylbenzene	1100	D
99-87-6	4-Isopropyltoluene	570	U
541-73-1	1,3-Dichlorobenzene	570	U
106-46-7	1,4-Dichlorobenzene	570	U
104-51-8	n-Butylbenzene	2800	D
95-50-1	1,2-Dichlorobenzene	570	U
96-12-8	1,2-Dibromo-3-chloropropane	570	U
120-82-1	1,2,4-Trichlorobenzene	570	U
87-68-3	Hexachlorobutadiene	570	U
87-61-6	1,2,3-Trichlorobenzene	570	U
91-20-3	Naphthalene	720	D

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02DDL

Sample wt/vol: 8.00 (g/mL) G Lab File ID: V8B7089.D

Level: (TRACE or LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 24 Date Analyzed: 12/19/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

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.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69772

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9734.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: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	250	U
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
74-88-4	Iodomethane	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
594-20-7	2,2-Dichloropropane	250	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
563-58-6	1,1-Dichloropropene	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
74-95-3	Dibromomethane	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
142-28-9	1,3-Dichloropropane	250	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69772

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9734.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: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
179601-23-1	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
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
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
103-65-1	n-Propylbenzene	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69772

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9734.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: 0.00 (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.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69791

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7080.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
75-71-8	Dichlorodifluoromethane	250	U
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
74-88-4	Iodomethane	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
594-20-7	2,2-Dichloropropane	250	U
74-97-5	Bromochloromethane	250	U
67-66-3	Chloroform	250	U
71-55-6	1,1,1-Trichloroethane	250	U
563-58-6	1,1-Dichloropropene	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
74-95-3	Dibromomethane	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
142-28-9	1,3-Dichloropropane	250	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69791

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7080.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
127-18-4	Tetrachloroethene	250	U
591-78-6	2-Hexanone	250	U
124-48-1	Dibromochloromethane	250	U
106-93-4	1,2-Dibromoethane	250	U
108-90-7	Chlorobenzene	250	U
630-20-6	1,1,1,2-Tetrachloroethane	250	U
100-41-4	Ethylbenzene	250	U
179601-23-1	m,p-Xylene	250	U
95-47-6	o-Xylene	250	U
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
108-86-1	Bromobenzene	250	U
96-18-4	1,2,3-Trichloropropane	250	U
103-65-1	n-Propylbenzene	250	U
95-49-8	2-Chlorotoluene	250	U
108-67-8	1,3,5-Trimethylbenzene	250	U
106-43-4	4-Chlorotoluene	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
96-12-8	1,2-Dibromo-3-chloropropane	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
87-68-3	Hexachlorobutadiene	250	U
87-61-6	1,2,3-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69791

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7080.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.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69772

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9756.D

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

% Moisture: not dec. 0.0 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	2600	
74-87-3	Chloromethane	2500	
75-01-4	Vinyl chloride	2300	
74-83-9	Bromomethane	2000	
75-00-3	Chloroethane	2400	
75-69-4	Trichlorofluoromethane	2500	
75-35-4	1,1-Dichloroethene	2200	
67-64-1	Acetone	2800	
74-88-4	Iodomethane	2200	
75-15-0	Carbon disulfide	2200	
75-09-2	Methylene chloride	2500	
156-60-5	trans-1,2-Dichloroethene	2300	
1634-04-4	Methyl tert-butyl ether	2400	
75-34-3	1,1-Dichloroethane	2300	
108-05-4	Vinyl acetate	2500	
78-93-3	2-Butanone	2500	
156-59-2	cis-1,2-Dichloroethene	2300	
594-20-7	2,2-Dichloropropane	2500	
74-97-5	Bromochloromethane	2100	
67-66-3	Chloroform	2300	
71-55-6	1,1,1-Trichloroethane	2200	
563-58-6	1,1-Dichloropropene	2200	
56-23-5	Carbon tetrachloride	2100	
107-06-2	1,2-Dichloroethane	2500	
71-43-2	Benzene	2300	
79-01-6	Trichloroethene	2100	
78-87-5	1,2-Dichloropropane	2400	
74-95-3	Dibromomethane	2400	
75-27-4	Bromodichloromethane	2300	
10061-01-5	cis-1,3-Dichloropropene	2300	
108-10-1	4-Methyl-2-pentanone	2400	
108-88-3	Toluene	2400	
10061-02-6	trans-1,3-Dichloropropene	2300	
79-00-5	1,1,2-Trichloroethane	2300	
142-28-9	1,3-Dichloropropane	2500	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69772

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V1M9756.D

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

% Moisture: not dec. 0.0 Date Analyzed: 12/18/2012

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 0.00 (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	2100	
591-78-6	2-Hexanone	3000	
124-48-1	Dibromochloromethane	2300	
106-93-4	1,2-Dibromoethane	2500	
108-90-7	Chlorobenzene	2400	
630-20-6	1,1,1,2-Tetrachloroethane	2300	
100-41-4	Ethylbenzene	2500	
179601-23-1	m,p-Xylene	4900	
95-47-6	o-Xylene	2400	
1330-20-7	Xylene (Total)	7300	
100-42-5	Styrene	2500	
75-25-2	Bromoform	2100	
98-82-8	Isopropylbenzene	2500	
79-34-5	1,1,2,2-Tetrachloroethane	2600	
108-86-1	Bromobenzene	2400	
96-18-4	1,2,3-Trichloropropane	2300	
103-65-1	n-Propylbenzene	2500	
95-49-8	2-Chlorotoluene	2400	
108-67-8	1,3,5-Trimethylbenzene	2700	
106-43-4	4-Chlorotoluene	2500	
98-06-6	tert-Butylbenzene	2600	
95-63-6	1,2,4-Trimethylbenzene	2700	
135-98-8	sec-Butylbenzene	2700	
99-87-6	4-Isopropyltoluene	2500	
541-73-1	1,3-Dichlorobenzene	2400	
106-46-7	1,4-Dichlorobenzene	2400	
104-51-8	n-Butylbenzene	2900	
95-50-1	1,2-Dichlorobenzene	2400	
96-12-8	1,2-Dibromo-3-chloropropane	2600	
120-82-1	1,2,4-Trichlorobenzene	2300	
87-68-3	Hexachlorobutadiene	2400	
87-61-6	1,2,3-Trichlorobenzene	2300	
91-20-3	Naphthalene	2500	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69791

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7078.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
75-71-8	Dichlorodifluoromethane	2400	
74-87-3	Chloromethane	2500	
75-01-4	Vinyl chloride	2500	
74-83-9	Bromomethane	2900	
75-00-3	Chloroethane	2300	
75-69-4	Trichlorofluoromethane	2500	
75-35-4	1,1-Dichloroethene	2500	
67-64-1	Acetone	2500	
74-88-4	Iodomethane	2700	
75-15-0	Carbon disulfide	2500	
75-09-2	Methylene chloride	2200	
156-60-5	trans-1,2-Dichloroethene	2500	
1634-04-4	Methyl tert-butyl ether	2500	
75-34-3	1,1-Dichloroethane	2500	
108-05-4	Vinyl acetate	2500	
78-93-3	2-Butanone	2600	
156-59-2	cis-1,2-Dichloroethene	2500	
594-20-7	2,2-Dichloropropane	2300	
74-97-5	Bromochloromethane	2500	
67-66-3	Chloroform	2400	
71-55-6	1,1,1-Trichloroethane	2500	
563-58-6	1,1-Dichloropropene	2600	
56-23-5	Carbon tetrachloride	2600	
107-06-2	1,2-Dichloroethane	2500	
71-43-2	Benzene	2500	
79-01-6	Trichloroethene	2500	
78-87-5	1,2-Dichloropropane	2500	
74-95-3	Dibromomethane	2500	
75-27-4	Bromodichloromethane	2600	
10061-01-5	cis-1,3-Dichloropropene	2500	
108-10-1	4-Methyl-2-pentanone	2400	
108-88-3	Toluene	2500	
10061-02-6	trans-1,3-Dichloropropene	2600	
79-00-5	1,1,2-Trichloroethane	2500	
142-28-9	1,3-Dichloropropane	2500	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69791

Sample wt/vol: 5.00 (g/mL) G Lab File ID: V8B7078.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
127-18-4	Tetrachloroethene	2900	
591-78-6	2-Hexanone	2400	
124-48-1	Dibromochloromethane	2600	
106-93-4	1,2-Dibromoethane	2600	
108-90-7	Chlorobenzene	2500	
630-20-6	1,1,1,2-Tetrachloroethane	2600	
100-41-4	Ethylbenzene	2600	
179601-23-1	m,p-Xylene	5200	
95-47-6	o-Xylene	2600	
1330-20-7	Xylene (Total)	7800	
100-42-5	Styrene	2600	
75-25-2	Bromoform	2700	
98-82-8	Isopropylbenzene	2600	
79-34-5	1,1,2,2-Tetrachloroethane	2500	
108-86-1	Bromobenzene	2500	
96-18-4	1,2,3-Trichloropropane	2400	
103-65-1	n-Propylbenzene	2600	
95-49-8	2-Chlorotoluene	2600	
108-67-8	1,3,5-Trimethylbenzene	2500	
106-43-4	4-Chlorotoluene	2600	
98-06-6	tert-Butylbenzene	2500	
95-63-6	1,2,4-Trimethylbenzene	2600	
135-98-8	sec-Butylbenzene	2600	
99-87-6	4-Isopropyltoluene	2600	
541-73-1	1,3-Dichlorobenzene	2500	
106-46-7	1,4-Dichlorobenzene	2500	
104-51-8	n-Butylbenzene	2600	
95-50-1	1,2-Dichlorobenzene	2600	
96-12-8	1,2-Dibromo-3-chloropropane	2500	
120-82-1	1,2,4-Trichlorobenzene	2600	
87-68-3	Hexachlorobutadiene	2800	
87-61-6	1,2,3-Trichlorobenzene	2600	
91-20-3	Naphthalene	2500	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO1-MW5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01DMS

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V8B7099.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 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
75-71-8	Dichlorodifluoromethane	3200	
74-87-3	Chloromethane	2900	
75-01-4	Vinyl chloride	3800	
74-83-9	Bromomethane	300	J
75-00-3	Chloroethane	2100	
75-69-4	Trichlorofluoromethane	3200	
75-35-4	1,1-Dichloroethene	2800	
67-64-1	Acetone	2600	
74-88-4	Iodomethane	1400	
75-15-0	Carbon disulfide	2700	
75-09-2	Methylene chloride	2500	
156-60-5	trans-1,2-Dichloroethene	2900	
1634-04-4	Methyl tert-butyl ether	2800	
75-34-3	1,1-Dichloroethane	2800	
108-05-4	Vinyl acetate	2300	
78-93-3	2-Butanone	3800	
156-59-2	cis-1,2-Dichloroethene	11000	
594-20-7	2,2-Dichloropropane	2000	
74-97-5	Bromochloromethane	2800	
67-66-3	Chloroform	2800	
71-55-6	1,1,1-Trichloroethane	3100	
563-58-6	1,1-Dichloropropene	2900	
56-23-5	Carbon tetrachloride	3100	
107-06-2	1,2-Dichloroethane	2900	
71-43-2	Benzene	2800	
79-01-6	Trichloroethene	3500	
78-87-5	1,2-Dichloropropane	2800	
74-95-3	Dibromomethane	2900	
75-27-4	Bromodichloromethane	2900	
10061-01-5	cis-1,3-Dichloropropene	2700	
108-10-1	4-Methyl-2-pentanone	2800	
108-88-3	Toluene	3000	
10061-02-6	trans-1,3-Dichloropropene	2800	
79-00-5	1,1,2-Trichloroethane	3300	
142-28-9	1,3-Dichloropropane	2700	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO1-MW5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01DMS

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V8B7099.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 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
127-18-4	Tetrachloroethene	5200	
591-78-6	2-Hexanone	2400	
124-48-1	Dibromochloromethane	2800	
106-93-4	1,2-Dibromoethane	2700	
108-90-7	Chlorobenzene	2700	
630-20-6	1,1,1,2-Tetrachloroethane	2800	
100-41-4	Ethylbenzene	3000	
179601-23-1	m,p-Xylene	6200	
95-47-6	o-Xylene	3200	
1330-20-7	Xylene (Total)	9400	
100-42-5	Styrene	2800	
75-25-2	Bromoform	2900	
98-82-8	Isopropylbenzene	3300	
79-34-5	1,1,2,2-Tetrachloroethane	2500	
108-86-1	Bromobenzene	2500	
96-18-4	1,2,3-Trichloropropane	2400	
103-65-1	n-Propylbenzene	3700	
95-49-8	2-Chlorotoluene	2600	
108-67-8	1,3,5-Trimethylbenzene	5600	
106-43-4	4-Chlorotoluene	2400	
98-06-6	tert-Butylbenzene	2800	
95-63-6	1,2,4-Trimethylbenzene	11000	
135-98-8	sec-Butylbenzene	4200	
99-87-6	4-Isopropyltoluene	4900	
541-73-1	1,3-Dichlorobenzene	2600	
106-46-7	1,4-Dichlorobenzene	2600	
104-51-8	n-Butylbenzene	7300	
95-50-1	1,2-Dichlorobenzene	2600	
96-12-8	1,2-Dibromo-3-chloropropane	3200	
120-82-1	1,2,4-Trichlorobenzene	2900	
87-68-3	Hexachlorobutadiene	3900	
87-61-6	1,2,3-Trichlorobenzene	2900	
91-20-3	Naphthalene	3600	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO1-MW5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01DMSD

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V8B7100.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 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
75-71-8	Dichlorodifluoromethane	2900	
74-87-3	Chloromethane	3400	
75-01-4	Vinyl chloride	4400	
74-83-9	Bromomethane	350	
75-00-3	Chloroethane	2300	
75-69-4	Trichlorofluoromethane	3200	
75-35-4	1,1-Dichloroethene	2900	
67-64-1	Acetone	3200	
74-88-4	Iodomethane	2100	
75-15-0	Carbon disulfide	3000	
75-09-2	Methylene chloride	2900	
156-60-5	trans-1,2-Dichloroethene	3300	
1634-04-4	Methyl tert-butyl ether	3300	
75-34-3	1,1-Dichloroethane	3200	
108-05-4	Vinyl acetate	2700	
78-93-3	2-Butanone	4400	
156-59-2	cis-1,2-Dichloroethene	12000	
594-20-7	2,2-Dichloropropane	2300	
74-97-5	Bromochloromethane	3200	
67-66-3	Chloroform	3100	
71-55-6	1,1,1-Trichloroethane	3400	
563-58-6	1,1-Dichloropropene	3200	
56-23-5	Carbon tetrachloride	3300	
107-06-2	1,2-Dichloroethane	3300	
71-43-2	Benzene	3100	
79-01-6	Trichloroethene	3900	
78-87-5	1,2-Dichloropropane	3200	
74-95-3	Dibromomethane	3300	
75-27-4	Bromodichloromethane	3300	
10061-01-5	cis-1,3-Dichloropropene	3100	
108-10-1	4-Methyl-2-pentanone	3500	
108-88-3	Toluene	3400	
10061-02-6	trans-1,3-Dichloropropene	3200	
79-00-5	1,1,2-Trichloroethane	3700	
142-28-9	1,3-Dichloropropane	3100	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SO1-MW5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01DMSD

Sample wt/vol: 7.90 (g/mL) G Lab File ID: V8B7100.D

Level: (TRACE/LOW/MED) MED Date Received: 12/12/2012

% Moisture: not dec. 27 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
127-18-4	Tetrachloroethene	5500	
591-78-6	2-Hexanone	2800	
124-48-1	Dibromochloromethane	3200	
106-93-4	1,2-Dibromoethane	3200	
108-90-7	Chlorobenzene	3100	
630-20-6	1,1,1,2-Tetrachloroethane	3200	
100-41-4	Ethylbenzene	3400	
179601-23-1	m,p-Xylene	7000	
95-47-6	o-Xylene	3600	
1330-20-7	Xylene (Total)	11000	
100-42-5	Styrene	3200	
75-25-2	Bromoform	3400	
98-82-8	Isopropylbenzene	3700	
79-34-5	1,1,2,2-Tetrachloroethane	3100	
108-86-1	Bromobenzene	3000	
96-18-4	1,2,3-Trichloropropane	2900	
103-65-1	n-Propylbenzene	4100	
95-49-8	2-Chlorotoluene	3000	
108-67-8	1,3,5-Trimethylbenzene	6000	
106-43-4	4-Chlorotoluene	2800	
98-06-6	tert-Butylbenzene	3200	
95-63-6	1,2,4-Trimethylbenzene	11000	
135-98-8	sec-Butylbenzene	4600	
99-87-6	4-Isopropyltoluene	5300	
541-73-1	1,3-Dichlorobenzene	3000	
106-46-7	1,4-Dichlorobenzene	3000	
104-51-8	n-Butylbenzene	7600	
95-50-1	1,2-Dichlorobenzene	3000	
96-12-8	1,2-Dibromo-3-chloropropane	3600	
120-82-1	1,2,4-Trichlorobenzene	3300	
87-68-3	Hexachlorobutadiene	4300	
87-61-6	1,2,3-Trichlorobenzene	3300	
91-20-3	Naphthalene	4000	

2D - FORM II VOA-4

SOIL VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Level: (LOW/MED) MED

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	MB-69772	99	89	108	106				0
02	SO1-MW5	101	90	106	113				0
03	DUP1	100	90	106	110				0
04	LCS-69772	99	94	108	108				0
05	LCS-69791	100	100	100	100				0
06	MB-69791	100	102	100	98				0
07	DUP1DL	104	101	97	104				0
08	SO1-MW5MS	107	99	96	119				0
09	SO1-MW5MSD	103	100	96	112				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

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2173.4595	0.0000	3218.4946	148	*	35-135
Chloromethane	2173.4595	0.0000	2880.8898	133	*	50-130
Vinyl chloride	2173.4595	609.2091	3792.2507	146	*	60-125
Bromomethane	2173.4595	0.0000	296.3241	14	*	30-160
Chloroethane	2173.4595	0.0000	2120.1101	98		40-155
Trichlorofluoromethane	2173.4595	0.0000	3184.6056	147		25-185
1,1-Dichloroethene	2173.4595	0.0000	2778.2853	128		65-135
Acetone	2173.4595	0.0000	2648.5317	122		20-160
Iodomethane	2173.4595	0.0000	1442.3827	66	*	70-126
Carbon disulfide	2173.4595	0.0000	2722.5747	125		45-160
Methylene chloride	2173.4595	0.0000	2476.8409	114		55-140
trans-1,2-Dichloroethene	2173.4595	147.8825	2930.6069	128		65-135
Methyl tert-butyl ether	2173.4595	0.0000	2754.3060	127	*	75-126
1,1-Dichloroethane	2173.4595	0.0000	2753.6609	127	*	75-125
Vinyl acetate	2173.4595	0.0000	2339.4159	108		65-138
2-Butanone	2173.4595	0.0000	3771.6701	174	*	30-160
cis-1,2-Dichloroethene	2173.4595	7076.2427	10874.2287	175	*	65-125
2,2-Dichloropropane	2173.4595	0.0000	1995.6728	92		65-135
Bromochloromethane	2173.4595	0.0000	2775.9274	128	*	70-125
Chloroform	2173.4595	0.0000	2782.4449	128	*	70-125
1,1,1-Trichloroethane	2173.4595	0.0000	3056.7525	141	*	70-135
1,1-Dichloropropene	2173.4595	0.0000	2854.8884	131		70-135
Carbon tetrachloride	2173.4595	0.0000	3111.1268	143	*	65-135
1,2-Dichloroethane	2173.4595	0.0000	2916.5592	134		70-135
Benzene	2173.4595	0.0000	2761.3712	127	*	75-125
Trichloroethene	2173.4595	1469.8261	3505.7285	94		75-125
1,2-Dichloropropane	2173.4595	0.0000	2757.7102	127	*	70-120
Dibromomethane	2173.4595	0.0000	2872.5557	132	*	75-130
Bromodichloromethane	2173.4595	0.0000	2876.6328	132	*	70-130
cis-1,3-Dichloropropene	2173.4595	0.0000	2684.6874	124		70-125
4-Methyl-2-pentanone	2173.4595	0.0000	2816.8911	130		45-145
Toluene	2173.4595	179.0666	2977.1593	129	*	70-125
trans-1,3-Dichloropropene	2173.4595	0.0000	2815.6151	130	*	65-125
1,1,2-Trichloroethane	2173.4595	0.0000	3342.5252	154	*	60-125
1,3-Dichloropropane	2173.4595	0.0000	2650.1022	122		75-125
Tetrachloroethene	2173.4595	5146.2251	5233.2430	4	*	65-140
2-Hexanone	2173.4595	0.0000	2398.1235	110		45-145
Dibromochloromethane	2173.4595	0.0000	2779.6096	128		65-130
1,2-Dibromoethane	2173.4595	0.0000	2693.3386	124		70-125
Chlorobenzene	2173.4595	0.0000	2668.7904	123		75-125
1,1,1,2-Tetrachloroethane	2173.4595	0.0000	2813.5141	129	*	75-125
Ethylbenzene	2173.4595	358.1594	2986.5491	121		75-125
m,p-Xylene	4346.9189	988.0577	6176.5420	119		80-125
o-Xylene	2173.4595	543.3684	3192.5439	122		75-125

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

Xylene (Total)	6520.3784	1531.4261	9369.0859	120		75-125
Styrene	2173.4595	0.0000	2770.1639	127	*	75-125
Bromoform	2173.4595	0.0000	2869.9408	132		55-135
Isopropylbenzene	2173.4595	321.4627	3273.0226	136	*	75-130
1,1,2,2-Tetrachloroethane	2173.4595	0.0000	2527.9736	116		55-130
Bromobenzene	2173.4595	0.0000	2526.2764	116		65-120
1,2,3-Trichloropropane	2173.4595	0.0000	2424.7540	112		65-130
n-Propylbenzene	2173.4595	754.5949	3654.4334	133		65-135
2-Chlorotoluene	2173.4595	0.0000	2637.5263	121		70-130
1,3,5-Trimethylbenzene	2173.4595	2814.0982	5613.0471	129		65-135
4-Chlorotoluene	2173.4595	0.0000	2443.6004	112		75-125
tert-Butylbenzene	2173.4595	0.0000	2777.3409	128		65-130
1,2,4-Trimethylbenzene	2173.4595	6771.0625	10734.9753	182	*	65-135
sec-Butylbenzene	2173.4595	1201.3558	4234.7286	140	*	65-130
4-Isopropyltoluene	2173.4595	1526.1588	4936.1761	157	*	75-135
1,3-Dichlorobenzene	2173.4595	0.0000	2603.2796	120		70-125
1,4-Dichlorobenzene	2173.4595	0.0000	2570.4947	118		70-125
n-Butylbenzene	2173.4595	3198.9678	7273.9270	187	*	65-140
1,2-Dichlorobenzene	2173.4595	0.0000	2648.6673	122	*	75-120
1,2-Dibromo-3-chloropropan	2173.4595	0.0000	3189.7473	147	*	40-135
1,2,4-Trichlorobenzene	2173.4595	0.0000	2939.9202	135	*	65-130
Hexachlorobutadiene	2173.4595	0.0000	3927.4198	181	*	55-140
1,2,3-Trichlorobenzene	2173.4595	0.0000	2879.5611	132		60-135
Naphthalene	2173.4595	882.9159	3559.9123	123		40-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2173.4595	2927.3107	135		9		0-40	35-135
Chloromethane	2173.4595	3431.6242	158	*	17		0-40	50-130
Vinyl chloride	2173.4595	4362.9926	173	*	16		0-40	60-125
Bromomethane	2173.4595	351.1140	16	*	17		0-40	30-160
Chloroethane	2173.4595	2312.7453	106		9		0-40	40-155
Trichlorofluoromethane	2173.4595	3156.1275	145		1		0-40	25-185
1,1-Dichloroethene	2173.4595	2942.6043	135	*	6		0-40	65-135
Acetone	2173.4595	3195.4031	147		19		0-40	20-160
Iodomethane	2173.4595	2052.3429	94		35		0-40	70-126
Carbon disulfide	2173.4595	3025.1281	139		11		0-40	45-160
Methylene chloride	2173.4595	2863.0775	132		14		0-40	55-140
trans-1,2-Dichloroethene	2173.4595	3296.0191	145	*	12		0-40	65-135
Methyl tert-butyl ether	2173.4595	3250.8146	150	*	17		0-40	75-126
1,1-Dichloroethane	2173.4595	3179.8067	146	*	14		0-40	75-125
Vinyl acetate	2173.4595	2724.4450	125		15		0-40	65-138
2-Butanone	2173.4595	4366.5558	201	*	15		0-40	30-160
cis-1,2-Dichloroethene	2173.4595	11571.3873	207	*	17		0-40	65-125
2,2-Dichloropropane	2173.4595	2263.6008	104		13		0-40	65-135
Bromochloromethane	2173.4595	3152.5247	145	*	13		0-40	70-125

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

Chloroform	2173.4595	3128.6772	144	*	12		0-40	70-125
1,1,1-Trichloroethane	2173.4595	3357.5170	154	*	9		0-40	70-135
1,1-Dichloropropene	2173.4595	3209.1300	148	*	12		0-40	70-135
Carbon tetrachloride	2173.4595	3257.5967	150	*	5		0-40	65-135
1,2-Dichloroethane	2173.4595	3305.8170	152	*	13		0-40	70-135
Benzene	2173.4595	3137.8855	144	*	13		0-40	75-125
Trichloroethene	2173.4595	3932.5175	113		19		0-40	75-125
1,2-Dichloropropane	2173.4595	3171.3978	146	*	14		0-40	70-120
Dibromomethane	2173.4595	3278.9899	151	*	13		0-40	75-130
Bromodichloromethane	2173.4595	3265.9974	150	*	13		0-40	70-130
cis-1,3-Dichloropropene	2173.4595	3065.1106	141	*	13		0-40	70-125
4-Methyl-2-pentanone	2173.4595	3459.8586	159	*	20		0-40	45-145
Toluene	2173.4595	3354.2793	146	*	13		0-40	70-125
trans-1,3-Dichloropropene	2173.4595	3240.0676	149	*	14		0-40	65-125
1,1,2-Trichloroethane	2173.4595	3717.1559	171	*	11		0-40	60-125
1,3-Dichloropropane	2173.4595	3092.1511	142	*	15		0-40	75-125
Tetrachloroethene	2173.4595	5540.4013	18	*	128	*	0-40	65-140
2-Hexanone	2173.4595	2771.0020	127		14		0-40	45-145
Dibromochloromethane	2173.4595	3207.6861	148	*	14		0-40	65-130
1,2-Dibromoethane	2173.4595	3180.1185	146	*	17		0-40	70-125
Chlorobenzene	2173.4595	3099.0159	143	*	15		0-40	75-125
1,1,1,2-Tetrachloroethane	2173.4595	3247.8909	149	*	14		0-40	75-125
Ethylbenzene	2173.4595	3372.1844	139	*	14		0-40	75-125
m,p-Xylene	4346.9189	7032.4997	139	*	15		0-40	80-125
o-Xylene	2173.4595	3620.3736	142	*	15		0-40	75-125
Xylene (Total)	6520.3784	10652.8733	140	*	15		0-40	75-125
Styrene	2173.4595	3221.6004	148	*	15		0-40	75-125
Bromoform	2173.4595	3365.8413	155	*	16		0-40	55-135
Isopropylbenzene	2173.4595	3675.9331	154	*	13		0-40	75-130
1,1,2,2-Tetrachloroethane	2173.4595	3067.6246	141	*	19		0-40	55-130
Bromobenzene	2173.4595	2967.3115	137	*	16		0-40	65-120
1,2,3-Trichloropropane	2173.4595	2870.2988	132	*	17		0-40	65-130
n-Propylbenzene	2173.4595	4112.0604	154	*	15		0-40	65-135
2-Chlorotoluene	2173.4595	3045.6688	140	*	14		0-40	70-130
1,3,5-Trimethylbenzene	2173.4595	6013.2099	147	*	13		0-40	65-135
4-Chlorotoluene	2173.4595	2837.9894	131	*	15		0-40	75-125
tert-Butylbenzene	2173.4595	3163.8118	146	*	13		0-40	65-130
1,2,4-Trimethylbenzene	2173.4595	11263.5758	207	*	13		0-40	65-135
sec-Butylbenzene	2173.4595	4564.2696	155	*	10		0-40	65-130
4-Isopropyltoluene	2173.4595	5289.5486	173	*	10		0-40	75-135
1,3-Dichlorobenzene	2173.4595	2997.6432	138	*	14		0-40	70-125
1,4-Dichlorobenzene	2173.4595	2996.9403	138	*	15		0-40	70-125
n-Butylbenzene	2173.4595	7592.1313	202	*	8		0-40	65-140
1,2-Dichlorobenzene	2173.4595	3047.8995	140	*	14		0-40	75-120
1,2-Dibromo-3-chloropropan	2173.4595	3634.4468	167	*	13		0-40	40-135
1,2,4-Trichlorobenzene	2173.4595	3308.2907	152	*	12		0-40	65-130
Hexachlorobutadiene	2173.4595	4280.2682	197	*	9		0-40	55-140

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

1,2,3-Trichlorobenzene	2173.4595	3283.4068	151	*	13		0-40	60-135
Naphthalene	2173.4595	4017.2723	144	*	16		0-40	40-125

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

* Values outside of QC limits

RPD: 1 out of 68 outside limits

Spike Recovery: 89 out of 136 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab Sample ID: LCS-69772 LCS Lot No.:

Date Extracted: 12/17/2012 Date Analyzed (1): 12/18/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2500.0000	0.0000	2589.3671	104		35 - 135
Chloromethane	2500.0000	0.0000	2491.8144	100		50 - 130
Vinyl chloride	2500.0000	0.0000	2327.0560	93		60 - 125
Bromomethane	2500.0000	0.0000	1957.7835	78		30 - 160
Chloroethane	2500.0000	0.0000	2401.0477	96		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2473.7626	99		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2237.2613	89		65 - 135
Acetone	2500.0000	0.0000	2836.0658	113		20 - 160
Iodomethane	2500.0000	0.0000	2205.5188	88		70 - 126
Carbon disulfide	2500.0000	0.0000	2227.4295	89		45 - 160
Methylene chloride	2500.0000	0.0000	2483.0175	99		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2286.0729	91		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2434.0469	97		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2325.8059	93		75 - 125
Vinyl acetate	2500.0000	0.0000	2477.4292	99		65 - 138
2-Butanone	2500.0000	0.0000	2496.4898	100		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2251.9345	90		65 - 125
2,2-Dichloropropane	2500.0000	0.0000	2502.8878	100		65 - 135
Bromochloromethane	2500.0000	0.0000	2130.1765	85		70 - 125
Chloroform	2500.0000	0.0000	2313.4452	93		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2207.7152	88		70 - 135
1,1-Dichloropropene	2500.0000	0.0000	2208.9346	88		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2102.1391	84		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2484.3954	99		70 - 135
Benzene	2500.0000	0.0000	2317.3334	93		75 - 125
Trichloroethene	2500.0000	0.0000	2112.6025	85		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2363.4186	95		70 - 120
Dibromomethane	2500.0000	0.0000	2436.5805	97		75 - 130
Bromodichloromethane	2500.0000	0.0000	2254.1835	90		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2322.7422	93		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2444.6326	98		45 - 145
Toluene	2500.0000	0.0000	2389.0648	96		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2321.4707	93		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2277.1865	91		60 - 125
1,3-Dichloropropane	2500.0000	0.0000	2536.3014	101		75 - 125
Tetrachloroethene	2500.0000	0.0000	2126.6542	85		65 - 140
2-Hexanone	2500.0000	0.0000	2963.0921	119		45 - 145
Dibromochloromethane	2500.0000	0.0000	2292.2825	92		65 - 130
1,2-Dibromoethane	2500.0000	0.0000	2526.0076	101		70 - 125
Chlorobenzene	2500.0000	0.0000	2374.5136	95		75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	0.0000	2250.2256	90		75 - 125
Ethylbenzene	2500.0000	0.0000	2470.2485	99		75 - 125
m,p-Xylene	5000.0000	0.0000	4911.6642	98		80 - 125
o-Xylene	2500.0000	0.0000	2407.7568	96		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab Sample ID: LCS-69772 LCS Lot No.:

Date Extracted: 12/17/2012 Date Analyzed (1): 12/18/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	7500.0000	0.0000	7319.4210	98		75 - 125
Styrene	2500.0000	0.0000	2483.8988	99		75 - 125
Bromoform	2500.0000	0.0000	2146.4045	86		55 - 135
Isopropylbenzene	2500.0000	0.0000	2464.3761	99		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2587.4200	103		55 - 130
Bromobenzene	2500.0000	0.0000	2365.5977	95		65 - 120
1,2,3-Trichloropropane	2500.0000	0.0000	2324.7861	93		65 - 130
n-Propylbenzene	2500.0000	0.0000	2485.9431	99		65 - 135
2-Chlorotoluene	2500.0000	0.0000	2425.9533	97		70 - 130
1,3,5-Trimethylbenzene	2500.0000	0.0000	2664.8560	107		65 - 135
4-Chlorotoluene	2500.0000	0.0000	2472.3015	99		75 - 125
tert-Butylbenzene	2500.0000	0.0000	2629.6285	105		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2712.0192	108		65 - 135
sec-Butylbenzene	2500.0000	0.0000	2652.4581	106		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2521.3342	101		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2423.5677	97		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2415.2343	97		70 - 125
n-Butylbenzene	2500.0000	0.0000	2860.0208	114		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2447.7480	98		75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	0.0000	2631.3637	105		40 - 135
1,2,4-Trichlorobenzene	2500.0000	0.0000	2341.9334	94		65 - 130
Hexachlorobutadiene	2500.0000	0.0000	2433.6203	97		55 - 140
1,2,3-Trichlorobenzene	2500.0000	0.0000	2337.7577	94		60 - 135
Naphthalene	2500.0000	0.0000	2496.1440	100		40 - 125

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab Sample ID: LCS-69791 LCS Lot No.:

Date Extracted: 12/18/2012 Date Analyzed (1): 12/19/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	2500.0000	0.0000	2419.1861	97		35 - 135
Chloromethane	2500.0000	0.0000	2498.9155	100		50 - 130
Vinyl chloride	2500.0000	0.0000	2466.3651	99		60 - 125
Bromomethane	2500.0000	0.0000	2883.4745	115		30 - 160
Chloroethane	2500.0000	0.0000	2345.1980	94		40 - 155
Trichlorofluoromethane	2500.0000	0.0000	2543.9330	102		25 - 185
1,1-Dichloroethene	2500.0000	0.0000	2478.0705	99		65 - 135
Acetone	2500.0000	0.0000	2543.0032	102		20 - 160
Iodomethane	2500.0000	0.0000	2687.4808	107		70 - 126
Carbon disulfide	2500.0000	0.0000	2490.1944	100		45 - 160
Methylene chloride	2500.0000	0.0000	2228.8151	89		55 - 140
trans-1,2-Dichloroethene	2500.0000	0.0000	2499.0349	100		65 - 135
Methyl tert-butyl ether	2500.0000	0.0000	2512.1217	100		75 - 126
1,1-Dichloroethane	2500.0000	0.0000	2492.2750	100		75 - 125
Vinyl acetate	2500.0000	0.0000	2475.4583	99		65 - 138
2-Butanone	2500.0000	0.0000	2642.5655	106		30 - 160
cis-1,2-Dichloroethene	2500.0000	0.0000	2522.2464	101		65 - 125
2,2-Dichloropropane	2500.0000	0.0000	2333.2603	93		65 - 135
Bromochloromethane	2500.0000	0.0000	2472.3603	99		70 - 125
Chloroform	2500.0000	0.0000	2423.6822	97		70 - 125
1,1,1-Trichloroethane	2500.0000	0.0000	2530.1066	101		70 - 135
1,1-Dichloropropene	2500.0000	0.0000	2562.8909	103		70 - 135
Carbon tetrachloride	2500.0000	0.0000	2603.1416	104		65 - 135
1,2-Dichloroethane	2500.0000	0.0000	2530.2371	101		70 - 135
Benzene	2500.0000	0.0000	2495.5432	100		75 - 125
Trichloroethene	2500.0000	0.0000	2526.4280	101		75 - 125
1,2-Dichloropropane	2500.0000	0.0000	2474.3722	99		70 - 120
Dibromomethane	2500.0000	0.0000	2537.5940	102		75 - 130
Bromodichloromethane	2500.0000	0.0000	2563.9474	103		70 - 130
cis-1,3-Dichloropropene	2500.0000	0.0000	2547.4742	102		70 - 125
4-Methyl-2-pentanone	2500.0000	0.0000	2413.1018	97		45 - 145
Toluene	2500.0000	0.0000	2488.1072	100		70 - 125
trans-1,3-Dichloropropene	2500.0000	0.0000	2584.2285	103		65 - 125
1,1,2-Trichloroethane	2500.0000	0.0000	2520.7844	101		60 - 125
1,3-Dichloropropane	2500.0000	0.0000	2512.7076	101		75 - 125
Tetrachloroethene	2500.0000	0.0000	2854.7115	114		65 - 140
2-Hexanone	2500.0000	0.0000	2414.9694	97		45 - 145
Dibromochloromethane	2500.0000	0.0000	2643.1439	106		65 - 130
1,2-Dibromoethane	2500.0000	0.0000	2564.6155	103		70 - 125
Chlorobenzene	2500.0000	0.0000	2537.9717	102		75 - 125
1,1,1,2-Tetrachloroethane	2500.0000	0.0000	2627.0848	105		75 - 125
Ethylbenzene	2500.0000	0.0000	2558.6704	102		75 - 125
m,p-Xylene	5000.0000	0.0000	5206.3323	104		80 - 125
o-Xylene	2500.0000	0.0000	2591.2366	104		75 - 125

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab Sample ID: LCS-69791 LCS Lot No.:

Date Extracted: 12/18/2012 Date Analyzed (1): 12/19/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	7500.0000	0.0000	7797.5689	104		75 - 125
Styrene	2500.0000	0.0000	2578.1071	103		75 - 125
Bromoform	2500.0000	0.0000	2688.9087	108		55 - 135
Isopropylbenzene	2500.0000	0.0000	2614.0333	105		75 - 130
1,1,2,2-Tetrachloroethane	2500.0000	0.0000	2467.8568	99		55 - 130
Bromobenzene	2500.0000	0.0000	2523.1002	101		65 - 120
1,2,3-Trichloropropane	2500.0000	0.0000	2434.4419	97		65 - 130
n-Propylbenzene	2500.0000	0.0000	2632.1512	105		65 - 135
2-Chlorotoluene	2500.0000	0.0000	2580.8287	103		70 - 130
1,3,5-Trimethylbenzene	2500.0000	0.0000	2537.1309	101		65 - 135
4-Chlorotoluene	2500.0000	0.0000	2561.2788	102		75 - 125
tert-Butylbenzene	2500.0000	0.0000	2521.7594	101		65 - 130
1,2,4-Trimethylbenzene	2500.0000	0.0000	2619.0828	105		65 - 135
sec-Butylbenzene	2500.0000	0.0000	2607.7759	104		65 - 130
4-Isopropyltoluene	2500.0000	0.0000	2612.7765	105		75 - 135
1,3-Dichlorobenzene	2500.0000	0.0000	2530.6194	101		70 - 125
1,4-Dichlorobenzene	2500.0000	0.0000	2523.2799	101		70 - 125
n-Butylbenzene	2500.0000	0.0000	2642.8556	106		65 - 140
1,2-Dichlorobenzene	2500.0000	0.0000	2558.4962	102		75 - 120
1,2-Dibromo-3-chloropropan	2500.0000	0.0000	2518.5339	101		40 - 135
1,2,4-Trichlorobenzene	2500.0000	0.0000	2608.2790	104		65 - 130
Hexachlorobutadiene	2500.0000	0.0000	2753.4736	110		55 - 140
1,2,3-Trichlorobenzene	2500.0000	0.0000	2585.2049	103		60 - 135
Naphthalene	2500.0000	0.0000	2468.2580	99		40 - 125

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-69772

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab File ID: V1M9734.D Lab Sample ID: MB-69772

Instrument ID: V1

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/17/2012

Level: (TRACE or LOW/MED) MED Time Analyzed: 23:45

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	SO1-MW5	L2554-01D	V1M9740.D	2:31
02	DUP1	L2554-02D	V1M9741.D	2:55
03	LCS-69772	LCS-69772	V1M9756.D	8:51

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-69791

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab File ID: V8B7080.D Lab Sample ID: MB-69791

Instrument ID: V10

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/19/2012

Level: (TRACE or LOW/MED) MED Time Analyzed: 4:34

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-69791	LCS-69791	V8B7078.D	3:40
02	DUP1DL	L2554-02DDL	V8B7089.D	8:38
03	SO1-MW5MS	L2554-01DMS	V8B7099.D	13:12
04	SO1-MW5MSD	L2554-01DMSD	V8B7100.D	13:39

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/13/2012 12/13/2012

EPA Sample No.(VSTD#####): VSTD0501U Date Analyzed: 12/17/2012

Lab File ID (Standard): V1M9729.D Time Analyzed: 21:47

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	1851995		4.62		1153286		7.506		429361		10.057	
	UPPER LIMIT	3703990		5.12		2306572		8.006		858722		10.557	
	LOWER LIMIT	925998		4.12		576643		7.006		214681		9.557	
	EPA SAMPLE NO.												
01	MB-69772	1908303		4.615		1171253		7.501		424603		10.052	
02	SO1-MW5	1838543		4.625		1149664		7.521		447974		10.072	
03	DUP1	1755722		4.616		1105716		7.511		438716		10.072	
04	LCS-69772	1730824		4.621		1070498		7.517		401030		10.068	

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.: L2554 Mod. Ref No.: SDG No.: SL2554

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####): VSTD05010L Date Analyzed: 12/19/2012

Lab File ID (Standard): V8B7075.D Time Analyzed: 2:19

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	634242		5.3		547921		8.291		284910		10.782	
	UPPER LIMIT	1268484		5.8		1095842		8.791		569820		11.282	
	LOWER LIMIT	317121		4.8		273961		7.791		142455		10.282	
	EPA SAMPLE NO.												
01	LCS-69791	630598		5.301		546125		8.291		279050		10.783	
02	MB-69791	600367		5.304		516142		8.291		255761		10.783	
03	DUP1DL	541423		5.301		493802		8.291		260306		10.783	
04	SO1-MW5MS	486438		5.300		461734		8.291		261245		10.786	
05	SO1-MW5MSD	533326		5.300		499381		8.294		279380		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 : Sterling Environmental Engineering P.C.

Project: Troy Belting, Cohoes

Laboratory Workorder / SDG #: L2554

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

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

II. HOLDING TIMES

A. Sample Preparation:

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

B. Sample Analysis:

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

III. METHODS

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

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S6
Instrument Type: GCMS-Semi
Description: HP7890A
Manufacturer: Agilent
Model: 7890A/5973
GC Column used: 30 m X 0.25 mm ID [0.25 um thickness] Rxi-5sil MS 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.

(MB-69705), recovery is above criteria for Nitrobenzene-d5 at 103% with criteria of (35-100).

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 samples: SO1-MW5 (L2554-01AMS) and SO1-MW5 (L2554-01AMSD).

Percent recoveries were within the QC limits with the following exceptions:

SO1-MW5 (L2554-01AMS)Percent Recovery is outside QC Limits, recovery is below criteria for Benzo(a)anthracene at 42% with criteria of (50-110), Benzo(a)pyrene at 42% with criteria of (50-

110), Benzo(b)fluoranthene at 29% with criteria of (45-115), Chrysene at 25% with criteria of (55-110), Fluoranthene at 0% with criteria of (55-115), Phenanthrene at 32% with criteria of (50-110) and Pyrene at 0% with criteria of (45-125).

SO1-MW5 (L2554-01AMSD)Percent Recovery is outside QC Limits, recovery is below criteria for Benzo(a)anthracene at 15% with criteria of (50-110), Benzo(a)pyrene at 23% with criteria of (50-110), Benzo(b)fluoranthene at 6% with criteria of (45-115), Benzo(k)fluoranthene at 38% with criteria of (45-125), Chrysene at 12% with criteria of (55-110), Fluoranthene at 0% with criteria of (55-115), Phenanthrene at 7% with criteria of (50-110) and Pyrene at 0% with criteria of (45-125).

Replicate RPDs were within the advisory QC limits with the exception for: Phenanthrene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene and Benzo(a)pyrene.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

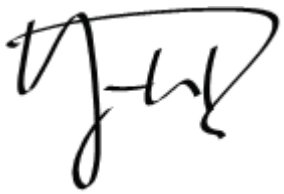
The following samples were analyzed at dilution:

SO1-MW5 (L2554-01ADL) : Dilution Factor: 2

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:_____12/30/2012_____

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

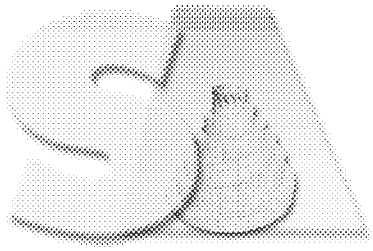
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6B1901.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	440	U
111-44-4	Bis(2-chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
541-73-1	1,3-Dichlorobenzene	440	U
106-46-7	1,4-Dichlorobenzene	440	U
95-50-1	1,2-Dichlorobenzene	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2´-oxybis(1-Chloropropane)	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
120-83-2	2,4-Dichlorophenol	440	U
120-82-1	1,2,4-Trichlorobenzene	440	U
91-20-3	Naphthalene	110	J
106-47-8	4-Chloroaniline	440	U
111-91-1	Bis(2-chloroethoxy)methane	440	U
87-68-3	Hexachlorobutadiene	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	440	U
208-96-8	Acenaphthylene	440	U
606-20-2	2,6-Dinitrotoluene	440	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	350	J
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	150	J

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6B1901.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
86-73-7	Fluorene	370	J
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	6900	
120-12-7	Anthracene	1000	
86-74-8	Carbazole	690	
84-74-2	Di-n-butylphthalate	300	J
206-44-0	Fluoranthene	14000	E
129-00-0	Pyrene	11000	E
85-68-7	Butylbenzylphthalate	270	J
91-94-1	3,3´-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	5500	
218-01-9	Chrysene	6400	
117-81-7	Bis(2-ethylhexyl)phthalate	1500	
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	7900	E
207-08-9	Benzo(k)fluoranthene	3700	
50-32-8	Benzo(a)pyrene	5600	
193-39-5	Indeno(1,2,3-cd)pyrene	3500	
53-70-3	Dibenzo(a,h)anthracene	980	
191-24-2	Benzo(g,h,i)perylene	4000	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01ADL

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6B1957.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/14/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	890	U
111-44-4	Bis(2-chloroethyl)ether	890	U
95-57-8	2-Chlorophenol	890	U
541-73-1	1,3-Dichlorobenzene	890	U
106-46-7	1,4-Dichlorobenzene	890	U
95-50-1	1,2-Dichlorobenzene	890	U
95-48-7	2-Methylphenol	890	U
108-60-1	2,2´-oxybis(1-Chloropropane)	890	U
106-44-5	4-Methylphenol	890	U
621-64-7	N-Nitroso-di-n-propylamine	890	U
67-72-1	Hexachloroethane	890	U
98-95-3	Nitrobenzene	890	U
78-59-1	Isophorone	890	U
88-75-5	2-Nitrophenol	890	U
105-67-9	2,4-Dimethylphenol	890	U
120-83-2	2,4-Dichlorophenol	890	U
120-82-1	1,2,4-Trichlorobenzene	890	U
91-20-3	Naphthalene	890	U
106-47-8	4-Chloroaniline	890	U
111-91-1	Bis(2-chloroethoxy)methane	890	U
87-68-3	Hexachlorobutadiene	890	U
59-50-7	4-Chloro-3-methylphenol	890	U
91-57-6	2-Methylnaphthalene	890	U
77-47-4	Hexachlorocyclopentadiene	890	U
88-06-2	2,4,6-Trichlorophenol	890	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	890	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	890	U
208-96-8	Acenaphthylene	890	U
606-20-2	2,6-Dinitrotoluene	890	U
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	320	DJ
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	890	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01ADL

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6B1957.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/14/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	890	U
84-66-2	Diethylphthalate	890	U
7005-72-3	4-Chlorophenyl-phenylether	890	U
86-73-7	Fluorene	350	DJ
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine	890	U
101-55-3	4-Bromophenyl-phenylether	890	U
118-74-1	Hexachlorobenzene	890	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	6600	D
120-12-7	Anthracene	940	D
86-74-8	Carbazole	660	DJ
84-74-2	Di-n-butylphthalate	290	DJ
206-44-0	Fluoranthene	13000	D
129-00-0	Pyrene	10000	D
85-68-7	Butylbenzylphthalate	270	DJ
91-94-1	3,3´-Dichlorobenzidine	890	U
56-55-3	Benzo(a)anthracene	5500	D
218-01-9	Chrysene	6000	D
117-81-7	Bis(2-ethylhexyl)phthalate	1500	D
117-84-0	Di-n-octylphthalate	890	U
205-99-2	Benzo(b)fluoranthene	8400	D
207-08-9	Benzo(k)fluoranthene	2700	D
50-32-8	Benzo(a)pyrene	5200	D
193-39-5	Indeno(1,2,3-cd)pyrene	3300	D
53-70-3	Dibenzo(a,h)anthracene	910	D
191-24-2	Benzo(g,h,i)perylene	3700	D

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6B1904.D

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

% Moisture: 24 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	420	U
111-44-4	Bis(2-chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
541-73-1	1,3-Dichlorobenzene	420	U
106-46-7	1,4-Dichlorobenzene	420	U
95-50-1	1,2-Dichlorobenzene	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2´-oxybis(1-Chloropropane)	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
120-83-2	2,4-Dichlorophenol	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
91-20-3	Naphthalene	190	J
106-47-8	4-Chloroaniline	420	U
111-91-1	Bis(2-chloroethoxy)methane	420	U
87-68-3	Hexachlorobutadiene	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	420	U
208-96-8	Acenaphthylene	420	U
606-20-2	2,6-Dinitrotoluene	420	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	420	U
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	420	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-02A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6B1904.D

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

% Moisture: 24 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
86-73-7	Fluorene	420	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	2100	
120-12-7	Anthracene	280	J
86-74-8	Carbazole	240	J
84-74-2	Di-n-butylphthalate	270	J
206-44-0	Fluoranthene	4600	
129-00-0	Pyrene	3700	
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3´-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	1800	
218-01-9	Chrysene	2300	
117-81-7	Bis(2-ethylhexyl)phthalate	920	
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	2900	
207-08-9	Benzo(k)fluoranthene	1000	
50-32-8	Benzo(a)pyrene	1900	
193-39-5	Indeno(1,2,3-cd)pyrene	1200	
53-70-3	Dibenzo(a,h)anthracene	370	J
191-24-2	Benzo(g,h,i)perylene	1400	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69705

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B1892.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2´-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	Bis(2-chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-69705

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B1892.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3´-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69705

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B1893.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2700	
111-44-4	Bis(2-chloroethyl)ether	2500	
95-57-8	2-Chlorophenol	2700	
541-73-1	1,3-Dichlorobenzene	2600	
106-46-7	1,4-Dichlorobenzene	2600	
95-50-1	1,2-Dichlorobenzene	2600	
95-48-7	2-Methylphenol	2400	
108-60-1	2,2´-oxybis(1-Chloropropane)	2300	
106-44-5	4-Methylphenol	2500	
621-64-7	N-Nitroso-di-n-propylamine	2500	
67-72-1	Hexachloroethane	2600	
98-95-3	Nitrobenzene	3200	
78-59-1	Isophorone	2900	
88-75-5	2-Nitrophenol	3200	
105-67-9	2,4-Dimethylphenol	3200	
120-83-2	2,4-Dichlorophenol	3100	
120-82-1	1,2,4-Trichlorobenzene	3100	
91-20-3	Naphthalene	2900	
106-47-8	4-Chloroaniline	1300	
111-91-1	Bis(2-chloroethoxy)methane	2900	
87-68-3	Hexachlorobutadiene	3500	
59-50-7	4-Chloro-3-methylphenol	2900	
91-57-6	2-Methylnaphthalene	3000	
77-47-4	Hexachlorocyclopentadiene	4600	
88-06-2	2,4,6-Trichlorophenol	3000	
95-95-4	2,4,5-Trichlorophenol	3000	
91-58-7	2-Chloronaphthalene	2900	
88-74-4	2-Nitroaniline	2800	
131-11-3	Dimethylphthalate	2600	
208-96-8	Acenaphthylene	2700	
606-20-2	2,6-Dinitrotoluene	2700	
99-09-2	3-Nitroaniline	1600	
83-32-9	Acenaphthene	2700	
51-28-5	2,4-Dinitrophenol	3400	
100-02-7	4-Nitrophenol	2800	
132-64-9	Dibenzofuran	2700	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-69705

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6B1893.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2600	
84-66-2	Diethylphthalate	2600	
7005-72-3	4-Chlorophenyl-phenylether	2700	
86-73-7	Fluorene	2600	
100-01-6	4-Nitroaniline	1900	
534-52-1	4,6-Dinitro-2-methylphenol	3400	
86-30-6	N-Nitrosodiphenylamine	2900	
101-55-3	4-Bromophenyl-phenylether	3200	
118-74-1	Hexachlorobenzene	3200	
87-86-5	Pentachlorophenol	3400	
85-01-8	Phenanthrene	2800	
120-12-7	Anthracene	2900	
86-74-8	Carbazole	2700	
84-74-2	Di-n-butylphthalate	2700	
206-44-0	Fluoranthene	2700	
129-00-0	Pyrene	3100	
85-68-7	Butylbenzylphthalate	2900	
91-94-1	3,3´-Dichlorobenzidine	1700	
56-55-3	Benzo(a)anthracene	2900	
218-01-9	Chrysene	2900	
117-81-7	Bis(2-ethylhexyl)phthalate	2800	
117-84-0	Di-n-octylphthalate	3200	
205-99-2	Benzo(b)fluoranthene	3200	
207-08-9	Benzo(k)fluoranthene	3200	
50-32-8	Benzo(a)pyrene	3200	
193-39-5	Indeno(1,2,3-cd)pyrene	3000	
53-70-3	Dibenzo(a,h)anthracene	3100	
191-24-2	Benzo(g,h,i)perylene	3000	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01AMS

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6B1902.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3300	
111-44-4	Bis(2-chloroethyl)ether	3000	
95-57-8	2-Chlorophenol	3300	
541-73-1	1,3-Dichlorobenzene	3100	
106-46-7	1,4-Dichlorobenzene	3200	
95-50-1	1,2-Dichlorobenzene	3100	
95-48-7	2-Methylphenol	3000	
108-60-1	2,2´-oxybis(1-Chloropropane)	2700	
106-44-5	4-Methylphenol	3100	
621-64-7	N-Nitroso-di-n-propylamine	3100	
67-72-1	Hexachloroethane	2800	
98-95-3	Nitrobenzene	3900	
78-59-1	Isophorone	3500	
88-75-5	2-Nitrophenol	4000	
105-67-9	2,4-Dimethylphenol	4300	
120-83-2	2,4-Dichlorophenol	3900	
120-82-1	1,2,4-Trichlorobenzene	3800	
91-20-3	Naphthalene	3700	
106-47-8	4-Chloroaniline	1600	
111-91-1	Bis(2-chloroethoxy)methane	3600	
87-68-3	Hexachlorobutadiene	4100	
59-50-7	4-Chloro-3-methylphenol	3900	
91-57-6	2-Methylnaphthalene	3800	
77-47-4	Hexachlorocyclopentadiene	2500	
88-06-2	2,4,6-Trichlorophenol	4000	
95-95-4	2,4,5-Trichlorophenol	3900	
91-58-7	2-Chloronaphthalene	3600	
88-74-4	2-Nitroaniline	3500	
131-11-3	Dimethylphthalate	3500	
208-96-8	Acenaphthylene	3400	
606-20-2	2,6-Dinitrotoluene	3500	
99-09-2	3-Nitroaniline	2100	
83-32-9	Acenaphthene	3800	
51-28-5	2,4-Dinitrophenol	2700	
100-02-7	4-Nitrophenol	4300	
132-64-9	Dibenzofuran	3700	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01AMS

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6B1902.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	3600	
84-66-2	Diethylphthalate	3500	
7005-72-3	4-Chlorophenyl-phenylether	3600	
86-73-7	Fluorene	3900	
100-01-6	4-Nitroaniline	2400	
534-52-1	4,6-Dinitro-2-methylphenol	2400	
86-30-6	N-Nitrosodiphenylamine	3600	
101-55-3	4-Bromophenyl-phenylether	3800	
118-74-1	Hexachlorobenzene	3900	
87-86-5	Pentachlorophenol	4700	
85-01-8	Phenanthrene	8300	E
120-12-7	Anthracene	4400	
86-74-8	Carbazole	3800	
84-74-2	Di-n-butylphthalate	3800	
206-44-0	Fluoranthene	12000	E
129-00-0	Pyrene	10000	E
85-68-7	Butylbenzylphthalate	3700	
91-94-1	3,3´-Dichlorobenzidine	1400	
56-55-3	Benzo(a)anthracene	7400	E
218-01-9	Chrysene	7500	E
117-81-7	Bis(2-ethylhexyl)phthalate	5000	
117-84-0	Di-n-octylphthalate	3800	
205-99-2	Benzo(b)fluoranthene	9200	E
207-08-9	Benzo(k)fluoranthene	6000	
50-32-8	Benzo(a)pyrene	7400	E
193-39-5	Indeno(1,2,3-cd)pyrene	6200	
53-70-3	Dibenzo(a,h)anthracene	4400	
191-24-2	Benzo(g,h,i)perylene	6300	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01AMSD

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6B1903.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3400	
111-44-4	Bis(2-chloroethyl)ether	3000	
95-57-8	2-Chlorophenol	3400	
541-73-1	1,3-Dichlorobenzene	3200	
106-46-7	1,4-Dichlorobenzene	3200	
95-50-1	1,2-Dichlorobenzene	3200	
95-48-7	2-Methylphenol	3100	
108-60-1	2,2´-oxybis(1-Chloropropane)	2800	
106-44-5	4-Methylphenol	3300	
621-64-7	N-Nitroso-di-n-propylamine	3200	
67-72-1	Hexachloroethane	3100	
98-95-3	Nitrobenzene	3900	
78-59-1	Isophorone	3600	
88-75-5	2-Nitrophenol	4000	
105-67-9	2,4-Dimethylphenol	4400	
120-83-2	2,4-Dichlorophenol	4100	
120-82-1	1,2,4-Trichlorobenzene	3900	
91-20-3	Naphthalene	4000	
106-47-8	4-Chloroaniline	1200	
111-91-1	Bis(2-chloroethoxy)methane	3600	
87-68-3	Hexachlorobutadiene	4100	
59-50-7	4-Chloro-3-methylphenol	4000	
91-57-6	2-Methylnaphthalene	3900	
77-47-4	Hexachlorocyclopentadiene	2000	
88-06-2	2,4,6-Trichlorophenol	4200	
95-95-4	2,4,5-Trichlorophenol	4200	
91-58-7	2-Chloronaphthalene	3800	
88-74-4	2-Nitroaniline	3800	
131-11-3	Dimethylphthalate	3700	
208-96-8	Acenaphthylene	3500	
606-20-2	2,6-Dinitrotoluene	3600	
99-09-2	3-Nitroaniline	2100	
83-32-9	Acenaphthene	3700	
51-28-5	2,4-Dinitrophenol	2000	
100-02-7	4-Nitrophenol	4200	
132-64-9	Dibenzofuran	3700	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SO1-MW5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L2554-01AMSD

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6B1903.D

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

% Moisture: 27 Decanted: (Y/N) N Date Received: 12/12/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/12/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/13/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	3700	
84-66-2	Diethylphthalate	3700	
7005-72-3	4-Chlorophenyl-phenylether	3800	
86-73-7	Fluorene	3800	
100-01-6	4-Nitroaniline	2400	
534-52-1	4,6-Dinitro-2-methylphenol	1900	
86-30-6	N-Nitrosodiphenylamine	3700	
101-55-3	4-Bromophenyl-phenylether	3900	
118-74-1	Hexachlorobenzene	4000	
87-86-5	Pentachlorophenol	4700	
85-01-8	Phenanthrene	7200	E
120-12-7	Anthracene	4100	
86-74-8	Carbazole	4000	
84-74-2	Di-n-butylphthalate	3900	
206-44-0	Fluoranthene	10000	E
129-00-0	Pyrene	9000	E
85-68-7	Butylbenzylphthalate	4000	
91-94-1	3,3´-Dichlorobenzidine	1400	
56-55-3	Benzo(a)anthracene	6200	
218-01-9	Chrysene	6900	
117-81-7	Bis(2-ethylhexyl)phthalate	4800	
117-84-0	Di-n-octylphthalate	4000	
205-99-2	Benzo(b)fluoranthene	8100	E
207-08-9	Benzo(k)fluoranthene	5500	
50-32-8	Benzo(a)pyrene	6600	
193-39-5	Indeno(1,2,3-cd)pyrene	5700	
53-70-3	Dibenzo(a,h)anthracene	4400	
191-24-2	Benzo(g,h,i)perylene	5800	

2K - FORM II SV-4

SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Level: (LOW/MED) LOW

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-69705	103 *	87	109	88	93	105			1
02	LCS-69705	92	84	105	77	85	106			0
03	SO1-MW5	80	76	86	67	72	93			0
04	SO1-MW5MS	84	77	94	72	77	99			0
05	SO1-MW5MSD	84	79	94	73	79	98			0
06	DUP1	78	75	96	66	72	98			0
07	SO1-MW5DL	77	71	83	67	71	87			0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som12.12.17.A

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS %REC	#	QC. LIMITS REC.
Phenol	4459.3800	0.0000	3270.6995	73		40-100
Bis(2-chloroethyl)ether	4459.3800	0.0000	2997.3924	67		40-105
2-Chlorophenol	4459.3800	0.0000	3320.3099	74		45-105
1,3-Dichlorobenzene	4459.3800	0.0000	3052.8210	68		40-100
1,4-Dichlorobenzene	4459.3800	0.0000	3151.0963	71		35-105
1,2-Dichlorobenzene	4459.3800	0.0000	3100.1260	70		45-95
2-Methylphenol	4459.3800	0.0000	3021.7925	68		40-105
2,2´-oxybis(1-Chloropropan	4459.3800	0.0000	2685.0689	60		20-115
4-Methylphenol	4459.3800	0.0000	3102.6368	70		40-105
N-Nitroso-di-n-propylamine	4459.3800	0.0000	3094.4647	69		40-115
Hexachloroethane	4459.3800	0.0000	2776.4637	62		35-110
Nitrobenzene	4459.3800	0.0000	3885.7874	87		40-115
Isophorone	4459.3800	0.0000	3522.5476	79		45-110
2-Nitrophenol	4459.3800	0.0000	3979.9872	89		40-110
2,4-Dimethylphenol	4459.3800	0.0000	4265.8173	96		30-105
2,4-Dichlorophenol	4459.3800	0.0000	3944.3089	88		45-110
1,2,4-Trichlorobenzene	4459.3800	0.0000	3841.1027	86		45-110
Naphthalene	4459.3800	113.6694	3680.1679	80		40-105
4-Chloroaniline	4459.3800	0.0000	1550.2104	35		10-100
Bis(2-chloroethoxy)methane	4459.3800	0.0000	3557.1729	80		45-110
Hexachlorobutadiene	4459.3800	0.0000	4052.3920	91		40-115
4-Chloro-3-methylphenol	4459.3800	0.0000	3919.9985	88		45-115
2-Methylnaphthalene	4459.3800	0.0000	3831.3317	86		45-105
Hexachlorocyclopentadiene	4459.3800	0.0000	2461.4950	55		8-148
2,4,6-Trichlorophenol	4459.3800	0.0000	3965.8383	89		45-110
2,4,5-Trichlorophenol	4459.3800	0.0000	3924.9478	88		50-110
2-Chloronaphthalene	4459.3800	0.0000	3596.3289	81		45-105
2-Nitroaniline	4459.3800	0.0000	3521.4337	79		45-120
Dimethylphthalate	4459.3800	0.0000	3496.4475	78		50-110
Acenaphthylene	4459.3800	0.0000	3418.8785	77		45-105
2,6-Dinitrotoluene	4459.3800	0.0000	3523.4379	79		50-110
3-Nitroaniline	4459.3800	0.0000	2127.5485	48		25-110
Acenaphthene	4459.3800	353.5416	3768.0085	77		45-110
2,4-Dinitrophenol	4459.3800	0.0000	2659.3456	60		15-130
4-Nitrophenol	4459.3800	0.0000	4295.3247	96		15-140
Dibenzofuran	4459.3800	148.2680	3666.7645	79		50-105
2,4-Dinitrotoluene	4459.3800	0.0000	3599.7111	81		50-115
Diethylphthalate	4459.3800	0.0000	3530.2462	79		50-115
4-Chlorophenyl-phenylether	4459.3800	0.0000	3625.3730	81		45-110
Fluorene	4459.3800	366.0659	3890.6731	79		50-110
4-Nitroaniline	4459.3800	0.0000	2428.2665	54		35-115
4,6-Dinitro-2-methylphenol	4459.3800	0.0000	2440.7352	55		30-135
N-Nitrosodiphenylamine	4459.3800	0.0000	3591.4408	81		50-115
4-Bromophenyl-phenylether	4459.3800	0.0000	3833.4532	86		45-115

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

Hexachlorobenzene	4459.3800	0.0000	3912.4666	88		45-120
Pentachlorophenol	4459.3800	0.0000	4654.2438	104		25-120
Phenanthrene	4459.3800	6914.9218	8342.6606	32	*	50-110
Anthracene	4459.3800	1044.8570	4415.3796	76		55-105
Carbazole	4459.3800	685.0531	3794.8430	70		45-115
Di-n-butylphthalate	4459.3800	303.7875	3783.5829	78		55-110
Fluoranthene	4459.3800	13987.6615	12466.1737	-34	*	55-115
Pyrene	4459.3800	10742.7164	10447.2570	-7	*	45-125
Butylbenzylphthalate	4459.3800	272.8485	3660.1549	76		50-125
3,3´-Dichlorobenzidine	4459.3800	0.0000	1422.7118	32		10-130
Benzo(a)anthracene	4459.3800	5503.6937	7391.6092	42	*	50-110
Chrysene	4459.3800	6398.4336	7513.6094	25	*	55-110
Bis(2-ethylhexyl)phthalate	4459.3800	1535.4724	5004.3772	78		45-125
Di-n-octylphthalate	4459.3800	0.0000	3827.4563	86		40-130
Benzo(b)fluoranthene	4459.3800	7869.6107	9166.6081	29	*	45-115
Benzo(k)fluoranthene	4459.3800	3725.1202	5981.5726	51		45-125
Benzo(a)pyrene	4459.3800	5555.7978	7424.5387	42	*	50-110
Indeno(1,2,3-cd)pyrene	4459.3800	3516.7739	6150.0437	59		40-120
Dibenzo(a,h)anthracene	4459.3800	979.2795	4378.8579	76		40-125
Benzo(g,h,i)perylene	4459.3800	3982.3827	6318.8235	52		40-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	4488.5262	3368.8515	75		2		0-40	40-100
Bis(2-chloroethyl)ether	4488.5262	3028.7704	67		0		0-40	40-105
2-Chlorophenol	4488.5262	3395.6407	76		2		0-40	45-105
1,3-Dichlorobenzene	4488.5262	3202.7050	71		4		0-40	40-100
1,4-Dichlorobenzene	4488.5262	3246.3594	72		2		0-40	35-105
1,2-Dichlorobenzene	4488.5262	3208.2975	71		3		0-40	45-95
2-Methylphenol	4488.5262	3097.3757	69		2		0-40	40-105
2,2´-oxybis(1-Chloropropan	4488.5262	2783.9753	62		3		0-40	20-115
4-Methylphenol	4488.5262	3272.7751	73		5		0-40	40-105
N-Nitroso-di-n-propylamine	4488.5262	3221.8048	72		3		0-40	40-115
Hexachloroethane	4488.5262	3093.6341	69		10		0-40	35-110
Nitrobenzene	4488.5262	3929.0610	88		0		0-40	40-115
Isophorone	4488.5262	3601.6765	80		2		0-40	45-110
2-Nitrophenol	4488.5262	3953.2435	88		1		0-40	40-110
2,4-Dimethylphenol	4488.5262	4384.9756	98		2		0-40	30-105
2,4-Dichlorophenol	4488.5262	4114.8525	92		4		0-40	45-110
1,2,4-Trichlorobenzene	4488.5262	3913.8623	87		1		0-40	45-110
Naphthalene	4488.5262	3965.5462	86		7		0-40	40-105
4-Chloroaniline	4488.5262	1205.3511	27		26		0-40	10-100
Bis(2-chloroethoxy)methane	4488.5262	3648.2148	81		2		0-40	45-110
Hexachlorobutadiene	4488.5262	4145.3850	92		2		0-40	40-115
4-Chloro-3-methylphenol	4488.5262	3984.0400	89		1		0-40	45-115
2-Methylnaphthalene	4488.5262	3947.0477	88		2		0-40	45-105

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

Hexachlorocyclopentadiene	4488.5262	1985.4905	44		22		0-40	8-148
2,4,6-Trichlorophenol	4488.5262	4172.7793	93		4		0-40	45-110
2,4,5-Trichlorophenol	4488.5262	4152.6147	93		5		0-40	50-110
2-Chloronaphthalene	4488.5262	3758.2591	84		4		0-40	45-105
2-Nitroaniline	4488.5262	3808.3763	85		7		0-40	45-120
Dimethylphthalate	4488.5262	3715.7236	83		5		0-40	50-110
Acenaphthylene	4488.5262	3528.6218	79		3		0-40	45-105
2,6-Dinitrotoluene	4488.5262	3649.0140	81		3		0-40	50-110
3-Nitroaniline	4488.5262	2055.5123	46		4		0-40	25-110
Acenaphthene	4488.5262	3728.0267	75		2		0-40	45-110
2,4-Dinitrophenol	4488.5262	1971.1321	44		30		0-40	15-130
4-Nitrophenol	4488.5262	4150.9117	92		4		0-40	15-140
Dibenzofuran	4488.5262	3724.3929	80		1		0-40	50-105
2,4-Dinitrotoluene	4488.5262	3702.2440	82		2		0-40	50-115
Diethylphthalate	4488.5262	3678.4500	82		3		0-40	50-115
4-Chlorophenyl-phenylether	4488.5262	3844.1082	86		5		0-40	45-110
Fluorene	4488.5262	3836.8442	77		2		0-40	50-110
4-Nitroaniline	4488.5262	2369.2834	53		3		0-40	35-115
4,6-Dinitro-2-methylphenol	4488.5262	1860.9257	41		28		0-40	30-135
N-Nitrosodiphenylamine	4488.5262	3705.5629	83		2		0-40	50-115
4-Bromophenyl-phenylether	4488.5262	3878.8465	86		1		0-40	45-115
Hexachlorobenzene	4488.5262	3983.8191	89		1		0-40	45-120
Pentachlorophenol	4488.5262	4709.9223	105		1		0-40	25-120
Phenanthrene	4488.5262	7210.0845	7	*	132	*	0-40	50-110
Anthracene	4488.5262	4148.4430	69		9		0-40	55-105
Carbazole	4488.5262	3954.0849	73		4		0-40	45-115
Di-n-butylphthalate	4488.5262	3910.5694	80		3		0-40	55-110
Fluoranthene	4488.5262	10472.3650	-78	*	-79	*	0-40	55-115
Pyrene	4488.5262	8970.8620	-39	*	-143	*	0-40	45-125
Butylbenzylphthalate	4488.5262	3953.6864	82		8		0-40	50-125
3,3´-Dichlorobenzidine	4488.5262	1399.6484	31		2		0-40	10-130
Benzo(a)anthracene	4488.5262	6179.9934	15	*	95	*	0-40	50-110
Chrysene	4488.5262	6928.1676	12	*	72	*	0-40	55-110
Bis(2-ethylhexyl)phthalate	4488.5262	4780.1950	72		7		0-40	45-125
Di-n-octylphthalate	4488.5262	4008.3320	89		4		0-40	40-130
Benzo(b)fluoranthene	4488.5262	8122.9937	6	*	135	*	0-40	45-115
Benzo(k)fluoranthene	4488.5262	5452.8004	38	*	27		0-40	45-125
Benzo(a)pyrene	4488.5262	6583.7273	23	*	59	*	0-40	50-110
Indeno(1,2,3-cd)pyrene	4488.5262	5733.3804	49		18		0-40	40-120
Dibenzo(a,h)anthracene	4488.5262	4395.4605	76		0		0-40	40-125
Benzo(g,h,i)perylene	4488.5262	5786.2732	40		26		0-40	40-125

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

* Values outside of QC limits

RPD: 7 out of 64 outside limits

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

Spike Recovery: 15 out of 128 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab Sample ID: LCS-69705 LCS Lot No.: CD-1510Z

Date Extracted: 12/12/2012 Date Analyzed (1): 12/13/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	3333.0000	0.0000	2651.3491	80		40 - 100
Bis(2-chloroethyl)ether	3333.0000	0.0000	2538.0718	76		40 - 105
2-Chlorophenol	3333.0000	0.0000	2657.1930	80		45 - 105
1,3-Dichlorobenzene	3333.0000	0.0000	2627.9194	79		40 - 100
1,4-Dichlorobenzene	3333.0000	0.0000	2641.3259	79		35 - 105
1,2-Dichlorobenzene	3333.0000	0.0000	2621.6547	79		45 - 95
2-Methylphenol	3333.0000	0.0000	2363.9736	71		40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	0.0000	2304.6144	69		20 - 115
4-Methylphenol	3333.0000	0.0000	2454.0890	74		40 - 105
N-Nitroso-di-n-propylamine	3333.0000	0.0000	2495.4537	75		40 - 115
Hexachloroethane	3333.0000	0.0000	2644.8222	79		35 - 110
Nitrobenzene	3333.0000	0.0000	3213.4590	96		40 - 115
Isophorone	3333.0000	0.0000	2858.4510	86		45 - 110
2-Nitrophenol	3333.0000	0.0000	3186.3859	96		40 - 110
2,4-Dimethylphenol	3333.0000	0.0000	3215.9454	96		30 - 105
2,4-Dichlorophenol	3333.0000	0.0000	3077.7710	92		45 - 110
1,2,4-Trichlorobenzene	3333.0000	0.0000	3106.5737	93		45 - 110
Naphthalene	3333.0000	0.0000	2903.1158	87		40 - 105
4-Chloroaniline	3333.0000	0.0000	1327.7715	40		10 - 100
Bis(2-chloroethoxy)methane	3333.0000	0.0000	2858.1151	86		45 - 110
Hexachlorobutadiene	3333.0000	0.0000	3450.1038	104		40 - 115
4-Chloro-3-methylphenol	3333.0000	0.0000	2860.1692	86		45 - 115
2-Methylnaphthalene	3333.0000	0.0000	2967.4274	89		45 - 105
Hexachlorocyclopentadiene	3333.0000	0.0000	4635.3441	139		8 - 148
2,4,6-Trichlorophenol	3333.0000	0.0000	3015.0535	90		45 - 110
2,4,5-Trichlorophenol	3333.0000	0.0000	2970.8749	89		50 - 110
2-Chloronaphthalene	3333.0000	0.0000	2920.5012	88		45 - 105
2-Nitroaniline	3333.0000	0.0000	2801.6992	84		45 - 120
Dimethylphthalate	3333.0000	0.0000	2646.4950	79		50 - 110
Acenaphthylene	3333.0000	0.0000	2654.8043	80		45 - 105
2,6-Dinitrotoluene	3333.0000	0.0000	2662.3287	80		50 - 110
3-Nitroaniline	3333.0000	0.0000	1636.0717	49		25 - 110
Acenaphthene	3333.0000	0.0000	2707.3688	81		45 - 110
2,4-Dinitrophenol	3333.0000	0.0000	3381.1846	101		15 - 130
4-Nitrophenol	3333.0000	0.0000	2785.8199	84		15 - 140
Dibenzofuran	3333.0000	0.0000	2724.6584	82		50 - 105
2,4-Dinitrotoluene	3333.0000	0.0000	2589.0313	78		50 - 115
Diethylphthalate	3333.0000	0.0000	2598.1851	78		50 - 115
4-Chlorophenyl-phenylether	3333.0000	0.0000	2718.4694	82		45 - 110
Fluorene	3333.0000	0.0000	2630.6171	79		50 - 110
4-Nitroaniline	3333.0000	0.0000	1898.0171	57		35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	0.0000	3405.9287	102		30 - 135
N-Nitrosodiphenylamine	3333.0000	0.0000	2919.0353	88		50 - 115
4-Bromophenyl-phenylether	3333.0000	0.0000	3157.5021	95		45 - 115

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab Sample ID: LCS-69705 LCS Lot No.: CD-1510Z

Date Extracted: 12/12/2012 Date Analyzed (1): 12/13/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	3333.0000	0.0000	3190.5527	96		45 - 120
Pentachlorophenol	3333.0000	0.0000	3417.1831	103		25 - 120
Phenanthrene	3333.0000	0.0000	2839.9709	85		50 - 110
Anthracene	3333.0000	0.0000	2875.5630	86		55 - 105
Carbazole	3333.0000	0.0000	2672.7663	80		45 - 115
Di-n-butylphthalate	3333.0000	0.0000	2720.6962	82		55 - 110
Fluoranthene	3333.0000	0.0000	2724.9497	82		55 - 115
Pyrene	3333.0000	0.0000	3148.3273	94		45 - 125
Butylbenzylphthalate	3333.0000	0.0000	2937.1142	88		50 - 125
3,3´-Dichlorobenzidine	3333.0000	0.0000	1687.6820	51		10 - 130
Benzo(a)anthracene	3333.0000	0.0000	2907.2026	87		50 - 110
Chrysene	3333.0000	0.0000	2860.0583	86		55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	0.0000	2800.1863	84		45 - 125
Di-n-octylphthalate	3333.0000	0.0000	3201.7035	96		40 - 130
Benzo(b)fluoranthene	3333.0000	0.0000	3203.0364	96		45 - 115
Benzo(k)fluoranthene	3333.0000	0.0000	3241.0525	97		45 - 125
Benzo(a)pyrene	3333.0000	0.0000	3152.0484	95		50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	0.0000	3048.7565	91		40 - 120
Dibenzo(a,h)anthracene	3333.0000	0.0000	3107.8815	93		40 - 125
Benzo(g,h,i)perylene	3333.0000	0.0000	2987.2747	90		40 - 125

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

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-69705

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Lab File ID: S6B1892.D Lab Sample ID: MB-69705

Instrument ID: S6 Date Extracted: 12/12/2012

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 12/13/2012

Level: (LOW/MED) LOW Time Analyzed: 15:40

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-69705	LCS-69705	S6B1893.D	12/13/2012
02	SO1-MW5	L2554-01A	S6B1901.D	12/13/2012
03	SO1-MW5MS	L2554-01AMS	S6B1902.D	12/13/2012
04	SO1-MW5MSD	L2554-01AMSD	S6B1903.D	12/13/2012
05	DUP1	L2554-02A	S6B1904.D	12/13/2012
06	SO1-MW5DL	L2554-01ADL	S6B1957.D	12/14/2012

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.: L2554 Mod. Ref No.: SDG No.: SL2554

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 12/11/2012 12/11/2012

EPA Sample No.(SSTD020##) SSTDD0256A Date Analyzed: 12/13/2012

Lab File ID (Standard): S6B1891.D Time Analyzed: 14:56

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	136322		4.696		529563		5.812		327311		7.293	
	UPPER LIMIT	272644		5.196		1059126		6.312		654622		7.793	
	LOWER LIMIT	68161		4.196		264782		5.312		163656		6.793	
	SAMPLE NO.												
01	MB-69705	183975		4.696		655806		5.812		416660		7.293	
02	LCS-69705	200172		4.702		705072		5.818		428012		7.299	
03	SO1-MW5	169713		4.696		593532		5.812		359270		7.293	
04	SO1-MW5MS	170262		4.702		597706		5.818		376626		7.299	
05	SO1-MW5MSD	166099		4.702		595287		5.818		375768		7.299	
06	DUP1	177541		4.702		615618		5.818		372624		7.299	

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.: L2554 Mod. Ref No.: SDG No.: SL2554

EPA Sample No.(SSTD020##) SSTDD0256A Date Analyzed: 12/13/2012

Lab File ID (Standard): S6B1891.D Time Analyzed: 14:56

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	616729		8.533		651081		10.836		609323		12.428	
	UPPER LIMIT	1233458		9.033		1302162		11.336		1218646		12.928	
	LOWER LIMIT	308365		8.033		325541		10.336		304662		11.928	
	SAMPLE NO.												
01	MB-69705	751755		8.538		688887		10.906		580417		12.528	
02	LCS-69705	715022		8.533		638824		10.842		498593		12.434	
03	SO1-MW5	651959		8.533		694146		10.824		609004		12.416	
04	SO1-MW5MS	687028		8.539		726095		10.830		631050		12.416	
05	SO1-MW5MSD	705984		8.539		729796		10.812		627765		12.399	
06	DUP1	674497		8.533		685845		10.818		608274		12.411	

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.: L2554 Mod. Ref No.: SDG No.: SL2554

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 12/11/2012 12/11/2012

EPA Sample No.(SSTD020##) SSTD0256B Date Analyzed: 12/14/2012

Lab File ID (Standard): S6B1931.D Time Analyzed: 11:31

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	103722		4.684		395178		5.795		247126		7.281	
	UPPER LIMIT	207444		5.184		790356		6.295		494252		7.781	
	LOWER LIMIT	51861		4.184		197589		5.295		123563		6.781	
	SAMPLE NO.												
01	SO1-MW5DL	135909		4.684		500716		5.795		326378		7.281	

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.: L2554 Mod. Ref No.: SDG No.: SL2554

EPA Sample No.(SSTD020##) SSTD0256B Date Analyzed: 12/14/2012

Lab File ID (Standard): S6B1931.D Time Analyzed: 11:31

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	464480		8.521		514700		10.812		493777		12.393	
	UPPER LIMIT	928960		9.021		1029400		11.312		987554		12.893	
	LOWER LIMIT	232240		8.021		257350		10.312		246889		11.893	
	SAMPLE NO.												
01	SO1-MW5DL	627274		8.515		674165		10.795		575829		12.369	

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.

* Metals *

REPORT NARRATIVE

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

Client : Sterling Environmental Engineering P.C.

Project: Troy Belting, Cohoes

Laboratory Workorder / SDG #: L2554

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 codes: SW846 6010C, SW846 7471B.

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test codes: SW846 3050B, 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):

Matrix spikes were performed on sample: SO1-MW5 (L2554-01BMS).

Percent recoveries were within the QC limits with the following exceptions:

SO1-MW5 (L2554-01BMS), Spike sample recovery is below criteria for Antimony at 52% with criteria of (75-125) and Chromium at 54% with criteria of (75-125). Copper and Lead recoveries did not require further action due to the fact that the native sample contained concentrations over 4 times that of the spiked value.

D. Post Digestion Spike (PDS):

Post-digestion spike analysis was performed on sample: SO1-MW5 (L2554-01BPDS).

SO1-MW5 (L2554-01BPDS) for Chromium and Antimony due to recoveries of these elements outside of QC limits in the matrix spike.

E. Duplicate sample:

Duplicate analyses were performed on sample: SO1-MW5 (L2554-01BDUP).

Relative percent differences were within the QC limits with the following exceptions:

SO1-MW5 (L2554-01BDUP), Duplicate analysis not within control limit for Arsenic, Chromium, Copper, Magnesium, Nickel and Mercury.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: SO1-MW5 (L2554-01BSD).

Percent differences were within the QC limits.

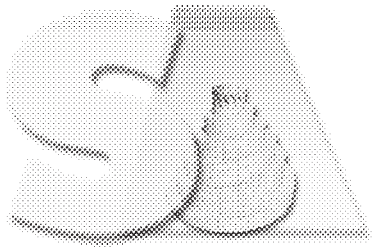
G. Samples:

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: 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

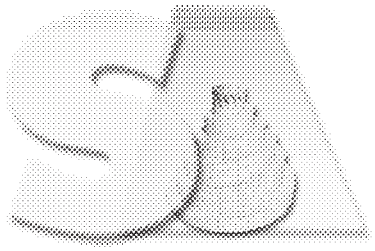
E — This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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.



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

DUP1

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Matrix (soil/water): SOIL Lab Sample ID: L2554-02

Level (low/med): MED Date Received: 12/12/2012

% Solids: 76.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19100			P
7440-36-0	Antimony	1.5		N	P
7440-38-2	Arsenic	12.2		*	P
7440-39-3	Barium	187			P
7440-41-7	Beryllium	1.2			P
7440-43-9	Cadmium	3.6			P
7440-70-2	Calcium	1940			P
7440-47-3	Chromium	45.0		N*	P
7440-48-4	Cobalt	17.9			P
7440-50-8	Copper	174		*	P
7439-89-6	Iron	43200			P
7439-92-1	Lead	101			P
7439-95-4	Magnesium	5760		*	P
7439-96-5	Manganese	930			P
7439-97-6	Mercury	0.12		*	CV
7440-02-0	Nickel	49.1		*	P
7440-09-7	Potassium	1570			P
7782-49-2	Selenium	2.5			P
7440-22-4	Silver	0.87	B		P
7440-23-5	Sodium	146			P
7440-28-0	Thallium	0.64	B		P
7440-62-2	Vanadium	35.8			P
7440-66-6	Zinc	220			P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SO1-MW5

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Matrix (soil/water): SOIL Lab Sample ID: L2554-01

Level (low/med): MED Date Received: 12/12/2012

% Solids: 72.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16400			P
7440-36-0	Antimony	2.4		N	P
7440-38-2	Arsenic	10.4		*	P
7440-39-3	Barium	184			P
7440-41-7	Beryllium	0.79			P
7440-43-9	Cadmium	5.0			P
7440-70-2	Calcium	2500			P
7440-47-3	Chromium	82.3		N*	P
7440-48-4	Cobalt	17.7			P
7440-50-8	Copper	299		*	P
7439-89-6	Iron	39700			P
7439-92-1	Lead	135			P
7439-95-4	Magnesium	6640		*	P
7439-96-5	Manganese	814			P
7439-97-6	Mercury	0.22		*	CV
7440-02-0	Nickel	67.4		*	P
7440-09-7	Potassium	1660			P
7782-49-2	Selenium	2.4			P
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	166			P
7440-28-0	Thallium	0.38	B		P
7440-62-2	Vanadium	32.0			P
7440-66-6	Zinc	303			P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-69709**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum				455.0	446.6		364	546.0	98.2
Antimony				22.8	24.7		18.2	27.3	108.3
Arsenic				22.8	23.3		18.2	27.3	102.2
Barium				455.0	469.1		364	546.0	103.1
Beryllium				11.4	11.5		9.1	13.6	100.9
Cadmium				11.4	11.6		9.1	13.6	101.8
Calcium				1135.0	1061.5		908	1362.0	93.5
Chromium				45.5	45.2		36.4	54.6	99.3
Cobalt				113.5	113.7		90.8	136.2	100.2
Copper				56.5	56.3		45.2	67.8	99.6
Iron				227.5	224.5		182	273.0	98.7
Lead				22.8	22.9		18.2	27.3	100.4
Magnesium				1135.0	1172.5		908	1362.0	103.3
Manganese				113.5	115.6		90.8	136.2	101.9
Nickel				113.5	114.2		90.8	136.2	100.6
Potassium				1135.0	1162.6		908	1362.0	102.4
Selenium				22.8	23.0		18.2	27.3	100.9
Silver				56.5	57.9		42.4	67.8	102.5
Sodium				1135.0	1158.7		908	1362.0	102.1
Thallium				22.8	21.5		18.2	27.3	94.3
Vanadium				113.5	110.7		90.8	136.2	97.5
Zinc				113.5	114.5		90.8	136.2	100.9

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-69763**

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

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SO1-MW5S

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

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

% Solids for Sample: 72.8

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75-125	17.6		2.4		29.5	52	N	P
Arsenic	75-125	43.2		10.4		29.5	111		P
Barium	75-125	833		184		590	110		P
Beryllium	75-125	16.9		0.79		14.7	110		P
Cadmium	75-125	21.0		5.0		14.7	109		P
Chromium	75-125	114		82.3		59.0	54	N	P
Cobalt	75-125	174		17.7		147	106		P
Copper		334		299		73.2	47		P
Lead		147		135		29.5	43		P
Nickel	75-125	217		67.4		147	102		P
Selenium	75-125	34.8		2.4		29.5	110		P
Silver	75-125	82.4		1.1	B	73.2	111		P
Thallium	75-125	28.9		0.29	B	29.5	97		P
Vanadium	75-125	185		32.0		147	104		P
Zinc	75-125	435		303		147	90		P
Mercury	75-125	1.3		0.22		1.1	103		CV

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

SO1-MW5A

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

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

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

Analyte	Control Limit %R	Spike Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony		525.43		36.83		455.0	107		P
Chromium		2171.71		1270.22		910.0	99		P

Comments:

6

DUPLICATES

EPA SAMPLE NO.

SO1-MW5D

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

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

% Solids for Sample: 72.8 % Solids for Duplicate: 72.8

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		16389.4033		14293.0099		13.7		P
Antimony	1.3	2.3866		1.8461		25.5		P
Arsenic		10.4331		7.9282		27.3	*	P
Barium		184.2615		178.8015		3		P
Beryllium	0.3	0.7854		0.7479		4.9		P
Cadmium		4.9989		5.2857		5.6		P
Calcium		2495.4131		2281.5958		9		P
Chromium		82.3023		52.2184		44.7	*	P
Cobalt	3.2	17.6744		14.6603		18.6		P
Copper		299.0429		229.0350		26.5	*	P
Iron		39730.9487		32953.6775		18.6		P
Lead		134.5316		130.5675		3		P
Magnesium		6644.3390		5412.2352		20.4	*	P
Manganese		813.5427		888.4351		8.8		P
Nickel		67.4318		52.5639		24.8	*	P
Potassium		1662.9692		1475.0217		12		P
Selenium	1.9	2.3526		2.5017		6.1		P
Silver		1.0982	B	0.9427	B	15.2		P
Sodium	65.0	166.1741		130.8600		23.8		P
Thallium		0.3791	B	0.4530	B	17.8		P
Vanadium		32.0064		27.6910		14.5		P
Zinc		302.7736		256.5680		16.5		P
Mercury	0.0	0.2233		0.3152		34.1	*	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-69763**

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

FIMS2_121218A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	12/18/12 10:21	C	12/18/12 10:39	C	12/18/12 10:58	C		C	M
Mercury	0.028	U	0.028	U	0.028	U	0.028	U	0.005	B	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-69709**

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

OPTIMA3_121214B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 12/14/12 12:15	C	12/14/12 12:53	C	12/14/12 13:33	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	1.200	U	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	0.031	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.002	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.015	U	P
Calcium	110.0	U	110.0	U	110.0	U	113.1	B	8.395	B	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	4.7	B	3.8	B	0.504	B	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	2.104	B	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	118.0	B	76.0	U	142.6	B	76.0	U	3.400	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	0.640	U	P
Sodium	45.1	B	70.4	B	52.8	B	29.0	U	2.728	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	0.180	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-69709**

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

OPTIMA3_121214C

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	12/14/12 14:22	C	12/14/12 14:53	C	12/14/12 15:11	C		C	M
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	0.486	B	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	0.082	B	P

Report Date:
09-Jan-13 15:37

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

Sterling Environmental Engineering P.C.
24 Wade Road
Latham, NY 12110

Work Order: L2625
Project : Town of Colonie
Project #:

Attn: Rodney Aldrich

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2625-01	MW-1	Aqueous	20-Dec-12 15:15	21-Dec-12 13:30
L2625-02	MW-2	Aqueous	20-Dec-12 14:30	21-Dec-12 13:30
L2625-03	MW-3	Aqueous	20-Dec-12 12:00	21-Dec-12 13:30
L2625-04	TRIP BLANK	Aqueous	20-Dec-12 00:00	21-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
DoD ELAP
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Report Date:
09-Jan-13 15:38

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Sterling Environmental Engineering P.C.
24 Wade Road
Latham, NY 12110

Work Order: L2626
Project : Town of Colonie
Project #:

Attn: Rodney Aldrich

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L2626-01	MW-4	Aqueous	20-Dec-12 09:35	21-Dec-12 13:30
L2626-02	MW-5	Aqueous	20-Dec-12 13:00	21-Dec-12 13:30
L2626-03	DUP-1	Aqueous	20-Dec-12 00:00	21-Dec-12 13:30
L2626-04	TRIP BLANK	Aqueous	20-Dec-12 00:00	21-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.

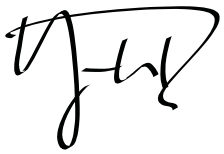
Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

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
DoD ELAP
Certificate # L2247 Testing

Authorized by:



Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
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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 : Town of Colonie **SDG :** L2625

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-1	L2625-01	SW8260_W	SW8270_W		SW6010_W	
MW-1	L2625-01				SW7470	
MW-2	L2625-02	SW8260_W	SW8270_W		SW6010_W	
MW-2	L2625-02				SW7470	
MW-3	L2625-03	SW8260_W	SW8270_W		SW6010_W	
MW-3	L2625-03				SW7470	
TRIP BLANK	L2625-04	SW8260_W				

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

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

Project Name : Town of Colonie **SDG :** L2625

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
L2625-01B	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012
L2625-02B	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012
L2625-03B	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012

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

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

Project Name : Town of Colonie **SDG :** L2625

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L2625-01A	AQ	SW8260_W	NA	LOW	1
L2625-02A	AQ	SW8260_W	NA	LOW	1
L2625-02ADL	AQ	SW8260_W	NA	LOW	2000
L2625-03A	AQ	SW8260_W	NA	LOW	1
L2625-04A	AQ	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 MSVOA

Project Name : Town of Colonie **SDG :** L2625

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L2625-01A	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2625-02A	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2625-02ADL	AQ	12/20/2012	12/21/2012	NA	12/27/2012
L2625-03A	AQ	12/20/2012	12/21/2012	NA	12/27/2012
L2625-04A	AQ	12/20/2012	12/21/2012	NA	12/24/2012

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

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

Project Name : Town of Colonie **SDG :** L2625

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
L2625-01B	AQ	SW8270_W	3510C	NA	1
L2625-02B	AQ	SW8270_W	3510C	NA	1
L2625-03B	AQ	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 ME

Project Name : Town of Colonie **SDG :** L2625

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L2625-01C	AQ	SW6010_W	12/21/2012	12/26/2012
L2625-02C	AQ	SW6010_W	12/21/2012	12/26/2012
L2625-03C	AQ	SW6010_W	12/21/2012	12/26/2012
SW7470				
L2625-01C	AQ	SW7470	12/21/2012	12/26/2012
L2625-02C	AQ	SW7470	12/21/2012	12/26/2012
L2625-03C	AQ	SW7470	12/21/2012	12/26/2012

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

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

Project Name : Town of Colonie **SDG :** L2626

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW-4	L2626-01	SW8260_W	SW8270_W		SW6010_W	
MW-4	L2626-01				SW7470	
MW-5	L2626-02	SW8260_W	SW8270_W		SW6010_W	
MW-5	L2626-02				SW7470	
DUP-1	L2626-03	SW8260_W	SW8270_W		SW6010_W	
DUP-1	L2626-03				SW7470	
TRIP BLANK	L2626-04	SW8260_W				

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

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

Project Name : Town of Colonie **SDG :** L2626

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L2626-01A	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2626-01ADL	AQ	12/20/2012	12/21/2012	NA	12/27/2012
L2626-02A	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2626-02ADL	AQ	12/20/2012	12/21/2012	NA	12/27/2012
L2626-02AMS	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2626-02AMSD	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2626-03A	AQ	12/20/2012	12/21/2012	NA	12/24/2012
L2626-03ADL	AQ	12/20/2012	12/21/2012	NA	12/27/2012
L2626-04A	AQ	12/20/2012	12/21/2012	NA	12/24/2012

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

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

Project Name : Town of Colonie **SDG :** L2626

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
L2626-01B	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012
L2626-02B	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012
L2626-02BMS	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012
L2626-02BMSD	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012
L2626-03B	AQ	12/20/2012	12/21/2012	12/23/2012	12/24/2012

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

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

Project Name : Town of Colonie **SDG :** L2626

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L2626-01A	AQ	SW8260_W	NA	LOW	1
L2626-01ADL	AQ	SW8260_W	NA	LOW	100
L2626-02A	AQ	SW8260_W	NA	LOW	1
L2626-02ADL	AQ	SW8260_W	NA	LOW	4000
L2626-02AMS	AQ	SW8260_W	NA	LOW	1
L2626-02AMSD	AQ	SW8260_W	NA	LOW	1
L2626-03A	AQ	SW8260_W	NA	LOW	1
L2626-03ADL	AQ	SW8260_W	NA	LOW	4000
L2626-04A	AQ	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 : Town of Colonie **SDG :** L2626

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
L2626-01B	AQ	SW8270_W	3510C	NA	1
L2626-02B	AQ	SW8270_W	3510C	NA	1
L2626-02BMS	AQ	SW8270_W	3510C	NA	1
L2626-02BMSD	AQ	SW8270_W	3510C	NA	1
L2626-03B	AQ	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 ME

Project Name : Town of Colonie **SDG :** L2626

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L2626-01C	AQ	SW6010_W	12/21/2012	12/26/2012
L2626-02C	AQ	SW6010_W	12/21/2012	12/26/2012
L2626-02CDUP	AQ	SW6010_W	12/21/2012	12/26/2012
L2626-02CMS	AQ	SW6010_W	12/21/2012	12/26/2012
L2626-03C	AQ	SW6010_W	12/21/2012	12/26/2012
SW7470				
L2626-01C	AQ	SW7470	12/21/2012	12/26/2012
L2626-02C	AQ	SW7470	12/21/2012	12/26/2012
L2626-02CDUP	AQ	SW7470	12/21/2012	12/26/2012
L2626-02CMS	AQ	SW7470	12/21/2012	12/26/2012
L2626-03C	AQ	SW7470	12/21/2012	12/26/2012

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

WorkOrder: L2625

Client ID: STERLING
Project: Town of Colonie
WO Name: Town of Colonie
Location: STERLING_COLONIE,
Comments: N/A

Case:
SDG:
PO: 2011-31

HC Due: 01/09/13
Fax Due: 12/26/12
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: 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
L2625-01A	MW-1	12/20/2012 15:15	12/21/2012	Aqueous	SW8260_W	/ +TICs					VOA
L2625-01B	MW-1	12/20/2012 15:15	12/21/2012	Aqueous	SW8270_W	/ +TICs					V4
L2625-01C	MW-1	12/20/2012 15:15	12/21/2012	Aqueous	SW6010_W	/ TAL,				Y	M5
L2625-01C	MW-1	12/20/2012 15:15	12/21/2012	Aqueous	SW7470	/					M5
L2625-02A	MW-2	12/20/2012 14:30	12/21/2012	Aqueous	SW8260_W	/ +TICs					VOA
L2625-02B	MW-2	12/20/2012 14:30	12/21/2012	Aqueous	SW8270_W	/ +TICs					V4
L2625-02C	MW-2	12/20/2012 14:30	12/21/2012	Aqueous	SW6010_W	/ TAL,				Y	M5
L2625-02C	MW-2	12/20/2012 14:30	12/21/2012	Aqueous	SW7470	/					M5
L2625-03A	MW-3	12/20/2012 12:00	12/21/2012	Aqueous	SW8260_W	/ +TICs					VOA
L2625-03B	MW-3	12/20/2012 12:00	12/21/2012	Aqueous	SW8270_W	/ +TICs					V4
L2625-03C	MW-3	12/20/2012 12:00	12/21/2012	Aqueous	SW6010_W	/ TAL,				Y	M5
L2625-03C	MW-3	12/20/2012 12:00	12/21/2012	Aqueous	SW7470	/					M5
L2625-04A	TRIP BLANK	12/20/2012 00:00	12/21/2012	Aqueous	SW8260_W	/ +TICs					VOA

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

HT = Test logged in but has been placed on hold

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

WorkOrder: L2626

Client ID: STERLING
Project: Town of Colonie
WO Name: Town of Colonie
Location: STERLING_COLONIE,
Comments: N/A

Case:
SDG:
PO: 2011-31

HC Due: 01/09/13
Fax Due: 12/26/12
Fax Report: ☑

Report Level: ASP-B
Special Program:
EDD: 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
L2626-01A	MW-4	12/20/2012 09:35	12/21/2012	Aqueous	SW8260_W	/ +TICs					VOA
L2626-01B	MW-4	12/20/2012 09:35	12/21/2012	Aqueous	SW8270_W	/ +TICs					V4
L2626-01C	MW-4	12/20/2012 09:35	12/21/2012	Aqueous	SW6010_W	/ TAL,				Y	M5
L2626-01C	MW-4	12/20/2012 09:35	12/21/2012	Aqueous	SW7470	/					M5
L2626-02A	MW-5	12/20/2012 13:00	12/21/2012	Aqueous	SW8260_W	/ +TICs			Y		VOA
L2626-02B	MW-5	12/20/2012 13:00	12/21/2012	Aqueous	SW8270_W	/ +TICs			Y		V4
L2626-02C	MW-5	12/20/2012 13:00	12/21/2012	Aqueous	SW6010_W	/ TAL,			Y	Y	M5
L2626-02C	MW-5	12/20/2012 13:00	12/21/2012	Aqueous	SW7470	/			Y		M5
L2626-03A	DUP-1	12/20/2012 00:00	12/21/2012	Aqueous	SW8260_W	/ +TICs					VOA
L2626-03B	DUP-1	12/20/2012 00:00	12/21/2012	Aqueous	SW8270_W	/ +TICs					V4
L2626-03C	DUP-1	12/20/2012 00:00	12/21/2012	Aqueous	SW6010_W	/ TAL,				Y	M5
L2626-03C	DUP-1	12/20/2012 00:00	12/21/2012	Aqueous	SW7470	/					M5
L2626-04A	TRIP BLANK	12/20/2012 00:00	12/21/2012	Aqueous	SW8260_W	/ +TICs					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 : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L2625

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: 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-69910 in batch 69910, Percent Recovery is outside QC Limits, recovery is below criteria for Iodomethane at 72% with criteria of (72-121).

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:

MW-2 (L2625-02ADL) : Dilution Factor: 2000

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:_____1/4/2013_____

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

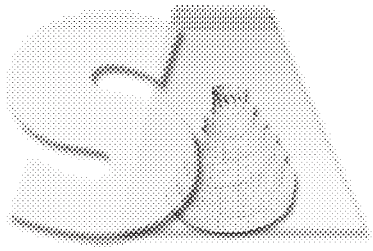
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7235.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	1.9	J
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.79	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	0.76	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7235.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7235.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7236.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	390	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	1.8	J
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	1600	E
67-64-1	Acetone	120	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	0.77	J
75-09-2	Methylene chloride	390	E
156-60-5	trans-1,2-Dichloroethene	110	
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	3100	E
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	7200	E
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	3.6	J
71-55-6	1,1,1-Trichloroethane	2100	E
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	2.9	J
71-43-2	Benzene	6.2	
79-01-6	Trichloroethene	10000	E
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	17	
108-88-3	Toluene	170	
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	7.7	
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7236.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	2400	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	27	
179601-23-1	m,p-Xylene	67	
95-47-6	o-Xylene	39	
1330-20-7	Xylene (Total)	110	
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	7.4	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	13	
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	37	
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	110	
135-98-8	sec-Butylbenzene	6.5	
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	8.2	
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	0.64	J
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	12	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7236.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	620-14-4	Benzene, 1-ethyl-3-methyl-	9.956	50	NJ
02	611-14-3	Benzene, 1-ethyl-2-methyl-	10.259	41	NJ
03	526-73-8	Benzene, 1,2,3-trimethyl-	10.857	89	NJ
04		Unknown	11.062	48	J
05	934-80-5	Benzene, 4-ethyl-1,2-dimethy	11.130	48	NJ
06	874-41-9	Benzene, 1-ethyl-2,4-dimethy	11.490	23	NJ
07	1560-06-1	Benzene, 2-butenyl-	11.606	32	NJ
08	527-84-4	Benzene, 1-methyl-2-(1-methy	12.284	37	NJ

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0017.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2000.0

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
75-71-8	Dichlorodifluoromethane	10000	U
74-87-3	Chloromethane	10000	U
75-01-4	Vinyl chloride	10000	U
74-83-9	Bromomethane	10000	U
75-00-3	Chloroethane	10000	U
75-69-4	Trichlorofluoromethane	10000	U
75-35-4	1,1-Dichloroethene	10000	U
67-64-1	Acetone	10000	U
74-88-4	Iodomethane	10000	U
75-15-0	Carbon disulfide	10000	U
75-09-2	Methylene chloride	1200	DJ
156-60-5	trans-1,2-Dichloroethene	10000	U
1634-04-4	Methyl tert-butyl ether	10000	U
75-34-3	1,1-Dichloroethane	3600	DJ
108-05-4	Vinyl acetate	10000	U
78-93-3	2-Butanone	10000	U
156-59-2	cis-1,2-Dichloroethene	27000	D
594-20-7	2,2-Dichloropropane	10000	U
74-97-5	Bromochloromethane	10000	U
67-66-3	Chloroform	10000	U
71-55-6	1,1,1-Trichloroethane	2500	DJ
563-58-6	1,1-Dichloropropene	10000	U
56-23-5	Carbon tetrachloride	10000	U
107-06-2	1,2-Dichloroethane	10000	U
71-43-2	Benzene	10000	U
79-01-6	Trichloroethene	210000	D
78-87-5	1,2-Dichloropropane	10000	U
74-95-3	Dibromomethane	10000	U
75-27-4	Bromodichloromethane	10000	U
10061-01-5	cis-1,3-Dichloropropene	10000	U
108-10-1	4-Methyl-2-pentanone	10000	U
108-88-3	Toluene	10000	U
10061-02-6	trans-1,3-Dichloropropene	10000	U
79-00-5	1,1,2-Trichloroethane	10000	U
142-28-9	1,3-Dichloropropane	10000	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0017.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2000.0

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
127-18-4	Tetrachloroethene	3600	DJ
591-78-6	2-Hexanone	10000	U
124-48-1	Dibromochloromethane	10000	U
106-93-4	1,2-Dibromoethane	10000	U
108-90-7	Chlorobenzene	10000	U
630-20-6	1,1,1,2-Tetrachloroethane	10000	U
100-41-4	Ethylbenzene	10000	U
179601-23-1	m,p-Xylene	10000	U
95-47-6	o-Xylene	10000	U
1330-20-7	Xylene (Total)	10000	U
100-42-5	Styrene	10000	U
75-25-2	Bromoform	10000	U
98-82-8	Isopropylbenzene	10000	U
79-34-5	1,1,2,2-Tetrachloroethane	10000	U
108-86-1	Bromobenzene	10000	U
96-18-4	1,2,3-Trichloropropane	10000	U
103-65-1	n-Propylbenzene	10000	U
95-49-8	2-Chlorotoluene	10000	U
108-67-8	1,3,5-Trimethylbenzene	10000	U
106-43-4	4-Chlorotoluene	10000	U
98-06-6	tert-Butylbenzene	10000	U
95-63-6	1,2,4-Trimethylbenzene	10000	U
135-98-8	sec-Butylbenzene	10000	U
99-87-6	4-Isopropyltoluene	10000	U
541-73-1	1,3-Dichlorobenzene	10000	U
106-46-7	1,4-Dichlorobenzene	10000	U
104-51-8	n-Butylbenzene	10000	U
95-50-1	1,2-Dichlorobenzene	10000	U
96-12-8	1,2-Dibromo-3-chloropropane	10000	U
120-82-1	1,2,4-Trichlorobenzene	10000	U
87-68-3	Hexachlorobutadiene	10000	U
87-61-6	1,2,3-Trichlorobenzene	10000	U
91-20-3	Naphthalene	10000	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-2DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0017.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2000.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0018.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	0.60	J
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0018.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0018.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7230.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	1.3	J
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7230.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7230.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7226.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	1.0	U
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
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	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
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	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
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7226.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7226.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0016.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0016.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0016.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7223.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	39	
74-87-3	Chloromethane	41	
75-01-4	Vinyl chloride	40	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	38	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	43	
67-64-1	Acetone	52	
74-88-4	Iodomethane	36	
75-15-0	Carbon disulfide	42	
75-09-2	Methylene chloride	39	
156-60-5	trans-1,2-Dichloroethene	44	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	45	
108-05-4	Vinyl acetate	51	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	45	
594-20-7	2,2-Dichloropropane	59	
74-97-5	Bromochloromethane	44	
67-66-3	Chloroform	45	
71-55-6	1,1,1-Trichloroethane	47	
563-58-6	1,1-Dichloropropene	45	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	45	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	45	
74-95-3	Dibromomethane	47	
75-27-4	Bromodichloromethane	47	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	47	
108-88-3	Toluene	45	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	47	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7223.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	40	
591-78-6	2-Hexanone	51	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	94	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	46	
75-25-2	Bromoform	51	
98-82-8	Isopropylbenzene	46	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	47	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	50	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	49	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	48	
87-68-3	Hexachlorobutadiene	51	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	48	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0012.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	55	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	58	
75-35-4	1,1-Dichloroethene	50	
67-64-1	Acetone	42	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	47	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	51	
78-93-3	2-Butanone	49	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	52	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	56	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0012.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	53	
591-78-6	2-Hexanone	50	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	53	
108-90-7	Chlorobenzene	53	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	53	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	53	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	54	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	51	
103-65-1	n-Propylbenzene	53	
95-49-8	2-Chlorotoluene	52	
108-67-8	1,3,5-Trimethylbenzene	53	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	53	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	54	
99-87-6	4-Isopropyltoluene	54	
541-73-1	1,3-Dichlorobenzene	52	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	48	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0013.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	54	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	48	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	42	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	51	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	48	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	51	
74-97-5	Bromochloromethane	49	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	52	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	54	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0013.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	50	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	50	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	52	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	50	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	51	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	46	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	48	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	48	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-69910	100	100	100	101				0
02	MB-69910	103	98	100	96				0
03	TRIP BLANK	104	102	99	97				0
04	MW-1	103	97	100	99				0
05	MW-2	100	96	97	101				0
06	LCS-69949	101	102	100	101				0
07	LCSD-69949	101	103	100	100				0
08	MB-69949	100	100	102	100				0
09	MW-2DL	100	99	101	98				0
10	MW-3	100	100	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-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69910 LCS Lot No.:

Date Extracted: 12/24/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	39.3899	79		30 - 155
Chloromethane	50.0000	0.0000	40.5514	81		40 - 125
Vinyl chloride	50.0000	0.0000	39.8027	80		50 - 145
Bromomethane	50.0000	0.0000	43.8353	88		30 - 145
Chloroethane	50.0000	0.0000	37.6736	75		60 - 135
Trichlorofluoromethane	50.0000	0.0000	48.3518	97		60 - 145
1,1-Dichloroethene	50.0000	0.0000	43.3058	87		70 - 130
Acetone	50.0000	0.0000	52.3776	105		40 - 140
Iodomethane	50.0000	0.0000	35.9529	72	*	72 - 121
Carbon disulfide	50.0000	0.0000	41.9778	84		35 - 160
Methylene chloride	50.0000	0.0000	39.1949	78		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	43.9484	88		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	46.8064	94		65 - 125
1,1-Dichloroethane	50.0000	0.0000	45.3694	91		70 - 135
Vinyl acetate	50.0000	0.0000	50.6316	101		38 - 163
2-Butanone	50.0000	0.0000	50.5819	101		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	45.1088	90		70 - 125
2,2-Dichloropropane	50.0000	0.0000	59.0786	118		70 - 135
Bromochloromethane	50.0000	0.0000	43.9815	88		65 - 130
Chloroform	50.0000	0.0000	44.5735	89		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	47.2641	95		65 - 130
1,1-Dichloropropene	50.0000	0.0000	44.7014	89		75 - 130
Carbon tetrachloride	50.0000	0.0000	49.3723	99		65 - 140
1,2-Dichloroethane	50.0000	0.0000	47.5974	95		70 - 130
Benzene	50.0000	0.0000	44.7704	90		80 - 120
Trichloroethene	50.0000	0.0000	44.5173	89		70 - 125
1,2-Dichloropropane	50.0000	0.0000	44.6655	89		75 - 125
Dibromomethane	50.0000	0.0000	47.3032	95		75 - 125
Bromodichloromethane	50.0000	0.0000	47.1113	94		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	48.9662	98		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	47.2362	94		60 - 135
Toluene	50.0000	0.0000	45.1235	90		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.7723	102		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	46.8892	94		75 - 125
1,3-Dichloropropane	50.0000	0.0000	47.8521	96		75 - 125
Tetrachloroethene	50.0000	0.0000	39.9887	80		45 - 150
2-Hexanone	50.0000	0.0000	50.5140	101		55 - 130
Dibromochloromethane	50.0000	0.0000	49.5079	99		60 - 135
1,2-Dibromoethane	50.0000	0.0000	47.8675	96		80 - 120
Chlorobenzene	50.0000	0.0000	46.0913	92		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	48.7905	98		80 - 130
Ethylbenzene	50.0000	0.0000	46.3989	93		75 - 125
m,p-Xylene	100.0000	0.0000	94.4147	94		75 - 130
o-Xylene	50.0000	0.0000	46.2098	92		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69910 LCS Lot No.:

Date Extracted: 12/24/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	140.6245	94		81 - 121
Styrene	50.0000	0.0000	45.8099	92		65 - 135
Bromoform	50.0000	0.0000	51.1199	102		70 - 130
Isopropylbenzene	50.0000	0.0000	46.4913	93		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.9806	96		65 - 130
Bromobenzene	50.0000	0.0000	46.7397	93		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	49.5406	99		75 - 125
n-Propylbenzene	50.0000	0.0000	47.1507	94		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.9608	94		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.2848	93		75 - 130
4-Chlorotoluene	50.0000	0.0000	47.7155	95		75 - 130
tert-Butylbenzene	50.0000	0.0000	49.6251	99		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.2920	97		75 - 130
sec-Butylbenzene	50.0000	0.0000	47.6332	95		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.8507	98		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	46.7238	93		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.8962	94		75 - 125
n-Butylbenzene	50.0000	0.0000	49.4992	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.6905	95		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	50.2435	100		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	47.9911	96		65 - 135
Hexachlorobutadiene	50.0000	0.0000	51.3175	103		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	47.3844	95		55 - 140
Naphthalene	50.0000	0.0000	48.3960	97		55 - 140

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

* Values outside of QC limits

Spike Recovery: 1 out of 68 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69949 LCS Lot No.:

Date Extracted: 12/27/2012 Date Analyzed (1): 12/27/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	55.4991	111		30 - 155
Chloromethane	50.0000	0.0000	47.8255	96		40 - 125
Vinyl chloride	50.0000	0.0000	50.1978	100		50 - 145
Bromomethane	50.0000	0.0000	48.5600	97		30 - 145
Chloroethane	50.0000	0.0000	49.5627	99		60 - 135
Trichlorofluoromethane	50.0000	0.0000	57.5914	115		60 - 145
1,1-Dichloroethene	50.0000	0.0000	49.5636	99		70 - 130
Acetone	50.0000	0.0000	42.3310	85		40 - 140
Iodomethane	50.0000	0.0000	51.4633	103		72 - 121
Carbon disulfide	50.0000	0.0000	50.4286	101		35 - 160
Methylene chloride	50.0000	0.0000	46.5610	93		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	50.9383	102		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	51.5791	103		65 - 125
1,1-Dichloroethane	50.0000	0.0000	52.8533	106		70 - 135
Vinyl acetate	50.0000	0.0000	51.4239	103		38 - 163
2-Butanone	50.0000	0.0000	48.9467	98		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	50.1694	100		70 - 125
2,2-Dichloropropane	50.0000	0.0000	52.1188	104		70 - 135
Bromochloromethane	50.0000	0.0000	51.7540	104		65 - 130
Chloroform	50.0000	0.0000	51.7459	103		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	53.4138	107		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.6915	103		75 - 130
Carbon tetrachloride	50.0000	0.0000	55.5484	111		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.0850	104		70 - 130
Benzene	50.0000	0.0000	51.8845	104		80 - 120
Trichloroethene	50.0000	0.0000	52.1522	104		70 - 125
1,2-Dichloropropane	50.0000	0.0000	51.4131	103		75 - 125
Dibromomethane	50.0000	0.0000	50.7017	101		75 - 125
Bromodichloromethane	50.0000	0.0000	53.3848	107		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	52.9373	106		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	49.8896	100		60 - 135
Toluene	50.0000	0.0000	52.1610	104		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.9076	106		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.0354	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	52.2294	104		75 - 125
Tetrachloroethene	50.0000	0.0000	53.4639	107		45 - 150
2-Hexanone	50.0000	0.0000	50.0529	100		55 - 130
Dibromochloromethane	50.0000	0.0000	52.8305	106		60 - 135
1,2-Dibromoethane	50.0000	0.0000	52.9741	106		80 - 120
Chlorobenzene	50.0000	0.0000	52.5357	105		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.8371	104		80 - 130
Ethylbenzene	50.0000	0.0000	53.2131	106		75 - 125
m,p-Xylene	100.0000	0.0000	106.5222	107		75 - 130
o-Xylene	50.0000	0.0000	52.5251	105		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69949 LCS Lot No.:

Date Extracted: 12/27/2012 Date Analyzed (1): 12/27/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	159.0474	106		81 - 121
Styrene	50.0000	0.0000	54.1478	108		65 - 135
Bromoform	50.0000	0.0000	53.7726	108		70 - 130
Isopropylbenzene	50.0000	0.0000	53.8363	108		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.3609	101		65 - 130
Bromobenzene	50.0000	0.0000	50.6704	101		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	51.3296	103		75 - 125
n-Propylbenzene	50.0000	0.0000	52.6916	105		70 - 130
2-Chlorotoluene	50.0000	0.0000	52.3031	105		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	53.3373	107		75 - 130
4-Chlorotoluene	50.0000	0.0000	51.4571	103		75 - 130
tert-Butylbenzene	50.0000	0.0000	53.4290	107		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	52.8213	106		75 - 130
sec-Butylbenzene	50.0000	0.0000	54.3758	109		70 - 125
4-Isopropyltoluene	50.0000	0.0000	53.5813	107		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	51.8628	104		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	51.3741	103		75 - 125
n-Butylbenzene	50.0000	0.0000	53.3880	107		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	51.0658	102		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	45.0220	90		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	49.9402	100		65 - 135
Hexachlorobutadiene	50.0000	0.0000	51.6721	103		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	46.9608	94		55 - 140
Naphthalene	50.0000	0.0000	47.7149	95		55 - 140

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCSD-69949 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	53.9615	108		3		40	30 - 155
Chloromethane	50.0000	47.7038	95		1		40	40 - 125
Vinyl chloride	50.0000	49.3537	99		1		40	50 - 145
Bromomethane	50.0000	48.0589	96		1		40	30 - 145
Chloroethane	50.0000	49.8297	100		1		40	60 - 135
Trichlorofluoromethane	50.0000	52.7896	106		8		40	60 - 145
1,1-Dichloroethene	50.0000	47.0072	94		5		40	70 - 130
Acetone	50.0000	42.0140	84		1		40	40 - 140
Iodomethane	50.0000	54.5335	109		6		40	72 - 121
Carbon disulfide	50.0000	50.8088	102		1		40	35 - 160
Methylene chloride	50.0000	45.3805	91		2		40	55 - 140
trans-1,2-Dichloroethene	50.0000	48.8671	98		4		40	60 - 140
Methyl tert-butyl ether	50.0000	50.3503	101		2		40	65 - 125
1,1-Dichloroethane	50.0000	51.0312	102		4		40	70 - 135
Vinyl acetate	50.0000	49.6417	99		4		40	38 - 163
2-Butanone	50.0000	47.8299	96		2		40	30 - 150
cis-1,2-Dichloroethene	50.0000	48.5106	97		3		40	70 - 125
2,2-Dichloropropane	50.0000	50.6235	101		3		40	70 - 135
Bromochloromethane	50.0000	49.0186	98		6		40	65 - 130
Chloroform	50.0000	50.2522	101		2		40	65 - 135
1,1,1-Trichloroethane	50.0000	51.8846	104		3		40	65 - 130
1,1-Dichloropropene	50.0000	49.8800	100		3		40	75 - 130
Carbon tetrachloride	50.0000	54.0081	108		3		40	65 - 140
1,2-Dichloroethane	50.0000	50.8079	102		2		40	70 - 130
Benzene	50.0000	49.9670	100		4		40	80 - 120
Trichloroethene	50.0000	49.6681	99		5		40	70 - 125
1,2-Dichloropropane	50.0000	49.8012	100		3		40	75 - 125
Dibromomethane	50.0000	49.4182	99		2		40	75 - 125
Bromodichloromethane	50.0000	50.9179	102		5		40	75 - 120
cis-1,3-Dichloropropene	50.0000	50.8755	102		4		40	70 - 130
4-Methyl-2-pentanone	50.0000	50.0006	100		0		40	60 - 135
Toluene	50.0000	50.5804	101		3		40	75 - 120
trans-1,3-Dichloropropene	50.0000	50.8767	102		4		40	55 - 140
1,1,2-Trichloroethane	50.0000	50.2948	101		1		40	75 - 125
1,3-Dichloropropane	50.0000	49.9617	100		4		40	75 - 125
Tetrachloroethene	50.0000	49.6512	99		8		40	45 - 150
2-Hexanone	50.0000	48.1879	96		4		40	55 - 130
Dibromochloromethane	50.0000	50.9969	102		4		40	60 - 135
1,2-Dibromoethane	50.0000	50.9721	102		4		40	80 - 120
Chlorobenzene	50.0000	49.9437	100		5		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	49.9301	100		4		40	80 - 130
Ethylbenzene	50.0000	49.8118	100		6		40	75 - 125
m,p-Xylene	100.0000	100.9441	101		6		40	75 - 130
o-Xylene	50.0000	49.8417	100		5		40	80 - 120
Xylene (Total)	150.0000	150.7858	101		5		40	81 - 121
Styrene	50.0000	51.6585	103		5		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCSD-69949 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	52.0797	104		4		40	70 - 130
Isopropylbenzene	50.0000	50.8935	102		6		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	48.4203	97		4		40	65 - 130
Bromobenzene	50.0000	49.0370	98		3		40	75 - 125
1,2,3-Trichloropropane	50.0000	49.0335	98		5		40	75 - 125
n-Propylbenzene	50.0000	50.1431	100		5		40	70 - 130
2-Chlorotoluene	50.0000	50.0830	100		5		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	50.7290	101		6		40	75 - 130
4-Chlorotoluene	50.0000	49.5739	99		4		40	75 - 130
tert-Butylbenzene	50.0000	50.8929	102		5		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	50.5946	101		5		40	75 - 130
sec-Butylbenzene	50.0000	50.4943	101		8		40	70 - 125
4-Isopropyltoluene	50.0000	50.6650	101		6		40	75 - 130
1,3-Dichlorobenzene	50.0000	49.9983	100		4		40	75 - 125
1,4-Dichlorobenzene	50.0000	49.4893	99		4		40	75 - 125
n-Butylbenzene	50.0000	50.5673	101		6		40	70 - 135
1,2-Dichlorobenzene	50.0000	49.0514	98		4		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	45.8831	92		2		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	48.7079	97		3		40	65 - 135
Hexachlorobutadiene	50.0000	47.8595	96		7		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	46.0638	92		2		40	55 - 140
Naphthalene	50.0000	47.5067	95		0		40	55 - 140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab File ID: V1N0016.D Lab Sample ID: MB-69949

Instrument ID: V1

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/27/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:06

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-69949	LCS-69949	V1N0012.D	15:31
02	LCSD-69949	LCSD-69949	V1N0013.D	15:55
03	MW-2DL	L2625-02ADL	V1N0017.D	17:31
04	MW-3	L2625-03A	V1N0018.D	17:53

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab File ID: V8B7226.D Lab Sample ID: MB-69910

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/24/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:05

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-69910	LCS-69910	V8B7223.D	11:42
02	TRIP BLANK	L2625-04A	V8B7230.D	14:56
03	MW-1	L2625-01A	V8B7235.D	17:13
04	MW-2	L2625-02A	V8B7236.D	17:41

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/27/2012 12/27/2012

EPA Sample No.(VSTD#####): VSTD0501C Date Analyzed: 12/27/2012

Lab File ID (Standard): V1N0002.D Time Analyzed: 11:50

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2188857		4.644		1251994		7.53		435159		10.081	
	UPPER LIMIT	4377714		5.144		2503988		8.03		870318		10.581	
	LOWER LIMIT	1094429		4.144		625997		7.03		217580		9.581	
	EPA SAMPLE NO.												
01	LCS-69949	1981826		4.644		1140110		7.530		399341		10.081	
02	LCSD-69949	2003469		4.645		1168200		7.531		406857		10.082	
03	MB-69949	1982725		4.640		1130353		7.526		391918		10.077	
04	MW-2DL	1988152		4.639		1142657		7.524		393288		10.076	
05	MW-3	1929565		4.631		1100128		7.527		383703		10.068	

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.: L2625 Mod. Ref No.: SDG No.: SL2625

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####): VSTD05010P Date Analyzed: 12/24/2012

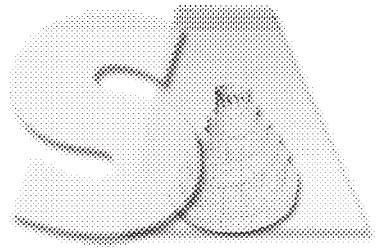
Lab File ID (Standard): V8B7222.D Time Analyzed: 11:15

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	526942		5.3		452355		8.287		233414		10.783	
	UPPER LIMIT	1053884		5.8		904710		8.787		466828		11.283	
	LOWER LIMIT	263471		4.8		226178		7.787		116707		10.283	
	EPA SAMPLE NO.												
01	LCS-69910	541637		5.300		466580		8.287		237889		10.783	
02	MB-69910	501040		5.300		433287		8.291		205566		10.782	
03	TRIP BLANK	510531		5.301		441250		8.291		205502		10.783	
04	MW-1	493210		5.304		420119		8.291		197604		10.783	
05	MW-2	554154		5.313		540241		8.294		281234		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.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Volatiles *

REPORT NARRATIVE

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

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L2626

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: 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-69910 in batch 69910, Percent Recovery is outside QC Limits, recovery is below criteria for Iodomethane at 72% with criteria of (72-121).

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

Matrix spikes were performed on samples: MW-5 (L2626-02AMS) and MW-5 (L2626-02AMSD).

Percent recoveries were within the QC limits with the following exceptions:

MW-5 (L2626-02AMS)Percent Recovery is outside QC Limits, recovery is above criteria for 1,1-Dichloroethane at 381% with criteria of (70-135), 2-Butanone at 2186% with criteria of (30-150), 2-Hexanone at 159% with criteria of (55-130), Acetone at 141% with criteria of (40-140), cis-1,2-Dichloroethene at 847% with criteria of (70-125), Methylene chloride at 152% with criteria of (55-140), Vinyl chloride at 435% with criteria of (50-145), recovery is below criteria for 1,1,1-Trichloroethane at 0% with criteria of (65-130), 1,1-Dichloroethene at 0% with criteria of (70-130), 1,2-Dichloropropane at 41% with criteria of (75-125), 1,3-Dichloropropane at 66% with criteria of (75-125), 2,2-Dichloropropane at 11% with criteria of (70-135), Hexachlorobutadiene at 44% with criteria of (50-140), Methyl tert-butyl ether at 48% with criteria of (65-125), Tetrachloroethene at 0% with criteria of (45-150), Toluene at 19% with criteria of (75-120), trans-1,2-Dichloroethene at 0% with criteria of (60-140) and Trichloroethene at 0% with criteria of (70-125).

MW-5 (L2626-02AMSD)Percent Recovery is outside QC Limits, recovery is above criteria for 1,1-Dichloroethane at 243% with criteria of (70-135), 2-Butanone at 1302% with criteria of (30-150), 2-Hexanone at 171% with criteria of (55-130), Acetone at 166% with criteria of (40-140), Methylene chloride at 178% with criteria of (55-140), recovery is below criteria for 1,1,1-Trichloroethane at 0% with criteria of (65-130), 1,1-Dichloroethene at 0% with criteria of (70-130), 1,2,4-Trimethylbenzene at 43% with criteria of (75-130), 1,2-Dichloropropane at 37% with criteria of (75-125), 1,3,5-Trimethylbenzene at 71% with criteria of (75-130), 2,2-Dichloropropane at 15% with criteria of (70-135), Carbon tetrachloride at 65% with criteria of (65-140), cis-1,2-Dichloroethene at 0% with criteria of (70-125), Hexachlorobutadiene at 48% with criteria of (50-140), Iodomethane at 68% with criteria of (72-121), m,p-Xylene at 71% with criteria of (75-130), Methyl tert-butyl ether at 56% with criteria of (65-125), o-Xylene at 73% with criteria of (80-120), Tetrachloroethene at 0% with criteria of (45-150), Toluene at 0% with criteria of (75-120), trans-1,2-Dichloroethene at 0% with criteria of (60-140), Trichloroethene at 0% with criteria of (70-125), Vinyl chloride at 0% with criteria of (50-145) and Xylene (Total) at 72% with criteria of

(81-121).

Replicate RPDs were within the advisory QC limits with the exception of the following:

MW-5 (L2626-02AMSD), Relative Percent Difference is greater than reported RPD limit for 2-Butanone.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

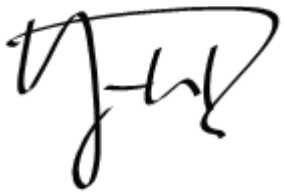
The following samples were analyzed at dilution:

MW-4 (L2626-01ADL) : Dilution Factor: 100
MW-5 (L2626-02ADL) : Dilution Factor: 4000
DUP-1 (L2626-03ADL) : Dilution Factor: 4000

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:_____1/4/2013_____

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

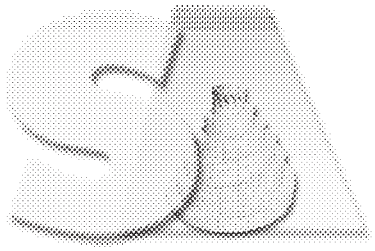
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7238.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	260	E
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	15	
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	34	
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	93	
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	6500	E
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	0.53	J
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	460	E
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7238.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	3.3	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7238.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0019.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

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
75-71-8	Dichlorodifluoromethane	500	U
74-87-3	Chloromethane	500	U
75-01-4	Vinyl chloride	320	DJ
74-83-9	Bromomethane	500	U
75-00-3	Chloroethane	500	U
75-69-4	Trichlorofluoromethane	500	U
75-35-4	1,1-Dichloroethene	500	U
67-64-1	Acetone	500	U
74-88-4	Iodomethane	500	U
75-15-0	Carbon disulfide	500	U
75-09-2	Methylene chloride	500	U
156-60-5	trans-1,2-Dichloroethene	500	U
1634-04-4	Methyl tert-butyl ether	500	U
75-34-3	1,1-Dichloroethane	95	DJ
108-05-4	Vinyl acetate	500	U
78-93-3	2-Butanone	500	U
156-59-2	cis-1,2-Dichloroethene	8300	D
594-20-7	2,2-Dichloropropane	500	U
74-97-5	Bromochloromethane	500	U
67-66-3	Chloroform	500	U
71-55-6	1,1,1-Trichloroethane	500	U
563-58-6	1,1-Dichloropropene	500	U
56-23-5	Carbon tetrachloride	500	U
107-06-2	1,2-Dichloroethane	500	U
71-43-2	Benzene	500	U
79-01-6	Trichloroethene	230	DJ
78-87-5	1,2-Dichloropropane	500	U
74-95-3	Dibromomethane	500	U
75-27-4	Bromodichloromethane	500	U
10061-01-5	cis-1,3-Dichloropropene	500	U
108-10-1	4-Methyl-2-pentanone	500	U
108-88-3	Toluene	500	U
10061-02-6	trans-1,3-Dichloropropene	500	U
79-00-5	1,1,2-Trichloroethane	500	U
142-28-9	1,3-Dichloropropane	500	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0019.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

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
127-18-4	Tetrachloroethene	500	U
591-78-6	2-Hexanone	500	U
124-48-1	Dibromochloromethane	500	U
106-93-4	1,2-Dibromoethane	500	U
108-90-7	Chlorobenzene	500	U
630-20-6	1,1,1,2-Tetrachloroethane	500	U
100-41-4	Ethylbenzene	500	U
179601-23-1	m,p-Xylene	500	U
95-47-6	o-Xylene	500	U
1330-20-7	Xylene (Total)	500	U
100-42-5	Styrene	500	U
75-25-2	Bromoform	500	U
98-82-8	Isopropylbenzene	500	U
79-34-5	1,1,2,2-Tetrachloroethane	500	U
108-86-1	Bromobenzene	500	U
96-18-4	1,2,3-Trichloropropane	500	U
103-65-1	n-Propylbenzene	500	U
95-49-8	2-Chlorotoluene	500	U
108-67-8	1,3,5-Trimethylbenzene	500	U
106-43-4	4-Chlorotoluene	500	U
98-06-6	tert-Butylbenzene	500	U
95-63-6	1,2,4-Trimethylbenzene	500	U
135-98-8	sec-Butylbenzene	500	U
99-87-6	4-Isopropyltoluene	500	U
541-73-1	1,3-Dichlorobenzene	500	U
106-46-7	1,4-Dichlorobenzene	500	U
104-51-8	n-Butylbenzene	500	U
95-50-1	1,2-Dichlorobenzene	500	U
96-12-8	1,2-Dibromo-3-chloropropane	500	U
120-82-1	1,2,4-Trichlorobenzene	500	U
87-68-3	Hexachlorobutadiene	500	U
87-61-6	1,2,3-Trichlorobenzene	500	U
91-20-3	Naphthalene	500	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-4DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0019.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 100.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7239.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5900	E
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	2700	E
67-64-1	Acetone	130	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	3.5	J
75-09-2	Methylene chloride	600	E
156-60-5	trans-1,2-Dichloroethene	320	E
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	1700	E
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	9900	E
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	3.5	J
71-55-6	1,1,1-Trichloroethane	5000	E
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	8.0	
71-43-2	Benzene	8.2	
79-01-6	Trichloroethene	11000	E
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	23	
108-88-3	Toluene	300	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	8.1	
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7239.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	2700	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	0.60	J
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	130	
95-47-6	o-Xylene	72	
1330-20-7	Xylene (Total)	200	
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	6.3	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	11	
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	26	
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	91	
135-98-8	sec-Butylbenzene	4.0	J
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	0.52	J
104-51-8	n-Butylbenzene	8.6	
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	1.2	J
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	0.78	J
91-20-3	Naphthalene	20	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7239.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (4.29735)	4.297	1400	J
02	611-14-3	Benzene, 1-ethyl-2-methyl-	9.960	54	NJ
03	622-96-8	Benzene, 1-ethyl-4-methyl-	10.259	32	NJ
04	526-73-8	Benzene, 1,2,3-trimethyl-	10.857	76	NJ
05	873-49-4	Benzene, cyclopropyl-	11.056	29	NJ
06	527-84-4	Benzene, 1-methyl-2-(1-methy	11.130	28	NJ
07		Unknown (11.60575)	11.606	19	J
08	95-93-2	Benzene, 1,2,4,5-tetramethyl	12.287	23	NJ

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0020.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4000.0

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
75-71-8	Dichlorodifluoromethane	20000	U
74-87-3	Chloromethane	20000	U
75-01-4	Vinyl chloride	7500	DJ
74-83-9	Bromomethane	20000	U
75-00-3	Chloroethane	20000	U
75-69-4	Trichlorofluoromethane	20000	U
75-35-4	1,1-Dichloroethene	20000	U
67-64-1	Acetone	20000	U
74-88-4	Iodomethane	20000	U
75-15-0	Carbon disulfide	20000	U
75-09-2	Methylene chloride	20000	U
156-60-5	trans-1,2-Dichloroethene	20000	U
1634-04-4	Methyl tert-butyl ether	20000	U
75-34-3	1,1-Dichloroethane	20000	U
108-05-4	Vinyl acetate	20000	U
78-93-3	2-Butanone	20000	U
156-59-2	cis-1,2-Dichloroethene	63000	D
594-20-7	2,2-Dichloropropane	20000	U
74-97-5	Bromochloromethane	20000	U
67-66-3	Chloroform	20000	U
71-55-6	1,1,1-Trichloroethane	6700	DJ
563-58-6	1,1-Dichloropropene	20000	U
56-23-5	Carbon tetrachloride	20000	U
107-06-2	1,2-Dichloroethane	20000	U
71-43-2	Benzene	20000	U
79-01-6	Trichloroethene	410000	D
78-87-5	1,2-Dichloropropane	20000	U
74-95-3	Dibromomethane	20000	U
75-27-4	Bromodichloromethane	20000	U
10061-01-5	cis-1,3-Dichloropropene	20000	U
108-10-1	4-Methyl-2-pentanone	20000	U
108-88-3	Toluene	20000	U
10061-02-6	trans-1,3-Dichloropropene	20000	U
79-00-5	1,1,2-Trichloroethane	20000	U
142-28-9	1,3-Dichloropropane	20000	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0020.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4000.0

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
127-18-4	Tetrachloroethene	5100	DJ
591-78-6	2-Hexanone	20000	U
124-48-1	Dibromochloromethane	20000	U
106-93-4	1,2-Dibromoethane	20000	U
108-90-7	Chlorobenzene	20000	U
630-20-6	1,1,1,2-Tetrachloroethane	20000	U
100-41-4	Ethylbenzene	20000	U
179601-23-1	m,p-Xylene	20000	U
95-47-6	o-Xylene	20000	U
1330-20-7	Xylene (Total)	20000	U
100-42-5	Styrene	20000	U
75-25-2	Bromoform	20000	U
98-82-8	Isopropylbenzene	20000	U
79-34-5	1,1,2,2-Tetrachloroethane	20000	U
108-86-1	Bromobenzene	20000	U
96-18-4	1,2,3-Trichloropropane	20000	U
103-65-1	n-Propylbenzene	20000	U
95-49-8	2-Chlorotoluene	20000	U
108-67-8	1,3,5-Trimethylbenzene	20000	U
106-43-4	4-Chlorotoluene	20000	U
98-06-6	tert-Butylbenzene	20000	U
95-63-6	1,2,4-Trimethylbenzene	20000	U
135-98-8	sec-Butylbenzene	20000	U
99-87-6	4-Isopropyltoluene	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
104-51-8	n-Butylbenzene	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
96-12-8	1,2-Dibromo-3-chloropropane	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
87-68-3	Hexachlorobutadiene	20000	U
87-61-6	1,2,3-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-5DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0020.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4000.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7240.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	6300	E
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	1.6	J
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	2700	E
67-64-1	Acetone	150	
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	4.1	J
75-09-2	Methylene chloride	610	E
156-60-5	trans-1,2-Dichloroethene	290	E
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	1600	E
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	8900	E
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	3.3	J
71-55-6	1,1,1-Trichloroethane	4400	E
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	7.2	
71-43-2	Benzene	8.4	
79-01-6	Trichloroethene	9200	E
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	22	
108-88-3	Toluene	280	E
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	6.9	
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7240.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	2600	E
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	0.63	J
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	52	
179601-23-1	m,p-Xylene	140	
95-47-6	o-Xylene	80	
1330-20-7	Xylene (Total)	220	
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	7.5	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	13	
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	32	
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	110	
135-98-8	sec-Butylbenzene	5.1	
99-87-6	4-Isopropyltoluene	7.4	
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	0.54	J
104-51-8	n-Butylbenzene	11	
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	1.2	J
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	0.75	J
91-20-3	Naphthalene	25	

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7240.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	620-14-4	Benzene, 1-ethyl-3-methyl-	9.956	45	NJ
02	611-14-3	Benzene, 1-ethyl-2-methyl-	10.262	36	NJ
03	526-73-8	Benzene, 1,2,3-trimethyl-	10.856	86	NJ
04	873-49-4	Benzene, cyclopropyl-	11.056	34	NJ
05	527-84-4	Benzene, 1-methyl-2-(1-methy	11.130	33	NJ
06	95-93-2	Benzene, 1,2,4,5-tetramethyl	12.284	28	NJ

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0021.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4000.0

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
75-71-8	Dichlorodifluoromethane	20000	U
74-87-3	Chloromethane	20000	U
75-01-4	Vinyl chloride	7200	DJ
74-83-9	Bromomethane	20000	U
75-00-3	Chloroethane	20000	U
75-69-4	Trichlorofluoromethane	20000	U
75-35-4	1,1-Dichloroethene	20000	U
67-64-1	Acetone	20000	U
74-88-4	Iodomethane	20000	U
75-15-0	Carbon disulfide	20000	U
75-09-2	Methylene chloride	20000	U
156-60-5	trans-1,2-Dichloroethene	20000	U
1634-04-4	Methyl tert-butyl ether	20000	U
75-34-3	1,1-Dichloroethane	20000	U
108-05-4	Vinyl acetate	20000	U
78-93-3	2-Butanone	20000	U
156-59-2	cis-1,2-Dichloroethene	58000	D
594-20-7	2,2-Dichloropropane	20000	U
74-97-5	Bromochloromethane	20000	U
67-66-3	Chloroform	20000	U
71-55-6	1,1,1-Trichloroethane	7400	DJ
563-58-6	1,1-Dichloropropene	20000	U
56-23-5	Carbon tetrachloride	20000	U
107-06-2	1,2-Dichloroethane	20000	U
71-43-2	Benzene	20000	U
79-01-6	Trichloroethene	390000	D
78-87-5	1,2-Dichloropropane	20000	U
74-95-3	Dibromomethane	20000	U
75-27-4	Bromodichloromethane	20000	U
10061-01-5	cis-1,3-Dichloropropene	20000	U
108-10-1	4-Methyl-2-pentanone	20000	U
108-88-3	Toluene	20000	U
10061-02-6	trans-1,3-Dichloropropene	20000	U
79-00-5	1,1,2-Trichloroethane	20000	U
142-28-9	1,3-Dichloropropane	20000	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0021.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4000.0

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
127-18-4	Tetrachloroethene	4400	DJ
591-78-6	2-Hexanone	20000	U
124-48-1	Dibromochloromethane	20000	U
106-93-4	1,2-Dibromoethane	20000	U
108-90-7	Chlorobenzene	20000	U
630-20-6	1,1,1,2-Tetrachloroethane	20000	U
100-41-4	Ethylbenzene	20000	U
179601-23-1	m,p-Xylene	20000	U
95-47-6	o-Xylene	20000	U
1330-20-7	Xylene (Total)	20000	U
100-42-5	Styrene	20000	U
75-25-2	Bromoform	20000	U
98-82-8	Isopropylbenzene	20000	U
79-34-5	1,1,2,2-Tetrachloroethane	20000	U
108-86-1	Bromobenzene	20000	U
96-18-4	1,2,3-Trichloropropane	20000	U
103-65-1	n-Propylbenzene	20000	U
95-49-8	2-Chlorotoluene	20000	U
108-67-8	1,3,5-Trimethylbenzene	20000	U
106-43-4	4-Chlorotoluene	20000	U
98-06-6	tert-Butylbenzene	20000	U
95-63-6	1,2,4-Trimethylbenzene	20000	U
135-98-8	sec-Butylbenzene	20000	U
99-87-6	4-Isopropyltoluene	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
104-51-8	n-Butylbenzene	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
96-12-8	1,2-Dibromo-3-chloropropane	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
87-68-3	Hexachlorobutadiene	20000	U
87-61-6	1,2,3-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

DUP-1DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0021.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/27/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 4000.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7231.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	0.53	J
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7231.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.95	J
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	1.7	J
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7231.D

Level: (TRACE or LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7226.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	1.0	U
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
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	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
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	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
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7226.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	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
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7226.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0016.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0016.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0016.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[1]EPA-designated Registry Number.

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7223.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	39	
74-87-3	Chloromethane	41	
75-01-4	Vinyl chloride	40	
74-83-9	Bromomethane	44	
75-00-3	Chloroethane	38	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	43	
67-64-1	Acetone	52	
74-88-4	Iodomethane	36	
75-15-0	Carbon disulfide	42	
75-09-2	Methylene chloride	39	
156-60-5	trans-1,2-Dichloroethene	44	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	45	
108-05-4	Vinyl acetate	51	
78-93-3	2-Butanone	51	
156-59-2	cis-1,2-Dichloroethene	45	
594-20-7	2,2-Dichloropropane	59	
74-97-5	Bromochloromethane	44	
67-66-3	Chloroform	45	
71-55-6	1,1,1-Trichloroethane	47	
563-58-6	1,1-Dichloropropene	45	
56-23-5	Carbon tetrachloride	49	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	45	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	45	
74-95-3	Dibromomethane	47	
75-27-4	Bromodichloromethane	47	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	47	
108-88-3	Toluene	45	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	47	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69910

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7223.D

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

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	40	
591-78-6	2-Hexanone	51	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	48	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	94	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	46	
75-25-2	Bromoform	51	
98-82-8	Isopropylbenzene	46	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	47	
96-18-4	1,2,3-Trichloropropane	50	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	50	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	49	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	49	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	48	
87-68-3	Hexachlorobutadiene	51	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	48	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0012.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	55	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	58	
75-35-4	1,1-Dichloroethene	50	
67-64-1	Acetone	42	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	47	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	51	
78-93-3	2-Butanone	49	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	52	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	56	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	51	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0012.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	53	
591-78-6	2-Hexanone	50	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	53	
108-90-7	Chlorobenzene	53	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	53	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	53	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	54	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	51	
103-65-1	n-Propylbenzene	53	
95-49-8	2-Chlorotoluene	52	
108-67-8	1,3,5-Trimethylbenzene	53	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	53	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	54	
99-87-6	4-Isopropyltoluene	54	
541-73-1	1,3-Dichlorobenzene	52	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	48	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0013.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
75-71-8	Dichlorodifluoromethane	54	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	48	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	47	
67-64-1	Acetone	42	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	51	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	49	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	48	
156-59-2	cis-1,2-Dichloroethene	49	
594-20-7	2,2-Dichloropropane	51	
74-97-5	Bromochloromethane	49	
67-66-3	Chloroform	50	
71-55-6	1,1,1-Trichloroethane	52	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	54	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	51	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-69949

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1N0013.D

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

% Moisture: not dec. Date Analyzed: 12/27/2012

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
127-18-4	Tetrachloroethene	50	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	50	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	52	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	51	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	50	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	51	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	46	
120-82-1	1,2,4-Trichlorobenzene	49	
87-68-3	Hexachlorobutadiene	48	
87-61-6	1,2,3-Trichlorobenzene	46	
91-20-3	Naphthalene	48	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7242.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	32	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	6100	E
74-83-9	Bromomethane	37	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	35	
75-35-4	1,1-Dichloroethene	2200	E
67-64-1	Acetone	210	E
74-88-4	Iodomethane	45	
75-15-0	Carbon disulfide	45	
75-09-2	Methylene chloride	670	E
156-60-5	trans-1,2-Dichloroethene	310	E
1634-04-4	Methyl tert-butyl ether	24	
75-34-3	1,1-Dichloroethane	1800	E
108-05-4	Vinyl acetate	42	
78-93-3	2-Butanone	1100	E
156-59-2	cis-1,2-Dichloroethene	10000	E
594-20-7	2,2-Dichloropropane	5.6	
74-97-5	Bromochloromethane	40	
67-66-3	Chloroform	42	
71-55-6	1,1,1-Trichloroethane	4600	E
563-58-6	1,1-Dichloropropene	40	
56-23-5	Carbon tetrachloride	33	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	9200	E
78-87-5	1,2-Dichloropropane	21	
74-95-3	Dibromomethane	40	
75-27-4	Bromodichloromethane	40	
10061-01-5	cis-1,3-Dichloropropene	44	
108-10-1	4-Methyl-2-pentanone	76	
108-88-3	Toluene	310	E
10061-02-6	trans-1,3-Dichloropropene	50	
79-00-5	1,1,2-Trichloroethane	53	
142-28-9	1,3-Dichloropropane	33	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02AMS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7242.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	2500	E
591-78-6	2-Hexanone	79	
124-48-1	Dibromochloromethane	47	
106-93-4	1,2-Dibromoethane	46	
108-90-7	Chlorobenzene	44	
630-20-6	1,1,1,2-Tetrachloroethane	45	
100-41-4	Ethylbenzene	91	
179601-23-1	m,p-Xylene	210	
95-47-6	o-Xylene	120	
1330-20-7	Xylene (Total)	330	
100-42-5	Styrene	46	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	42	
96-18-4	1,2,3-Trichloropropane	48	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	41	
108-67-8	1,3,5-Trimethylbenzene	64	
106-43-4	4-Chlorotoluene	42	
98-06-6	tert-Butylbenzene	40	
95-63-6	1,2,4-Trimethylbenzene	130	
135-98-8	sec-Butylbenzene	41	
99-87-6	4-Isopropyltoluene	42	
541-73-1	1,3-Dichlorobenzene	41	
106-46-7	1,4-Dichlorobenzene	41	
104-51-8	n-Butylbenzene	44	
95-50-1	1,2-Dichlorobenzene	41	
96-12-8	1,2-Dibromo-3-chloropropane	48	
120-82-1	1,2,4-Trichlorobenzene	37	
87-68-3	Hexachlorobutadiene	22	
87-61-6	1,2,3-Trichlorobenzene	36	
91-20-3	Naphthalene	65	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7243.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
75-71-8	Dichlorodifluoromethane	28	
74-87-3	Chloromethane	51	
75-01-4	Vinyl chloride	4900	E
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	32	
75-35-4	1,1-Dichloroethene	2000	E
67-64-1	Acetone	220	E
74-88-4	Iodomethane	34	
75-15-0	Carbon disulfide	50	
75-09-2	Methylene chloride	690	E
156-60-5	trans-1,2-Dichloroethene	250	E
1634-04-4	Methyl tert-butyl ether	28	
75-34-3	1,1-Dichloroethane	1800	E
108-05-4	Vinyl acetate	48	
78-93-3	2-Butanone	650	E
156-59-2	cis-1,2-Dichloroethene	7800	E
594-20-7	2,2-Dichloropropane	7.6	
74-97-5	Bromochloromethane	44	
67-66-3	Chloroform	45	
71-55-6	1,1,1-Trichloroethane	4000	E
563-58-6	1,1-Dichloropropene	42	
56-23-5	Carbon tetrachloride	32	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	56	
79-01-6	Trichloroethene	8200	E
78-87-5	1,2-Dichloropropane	18	
74-95-3	Dibromomethane	42	
75-27-4	Bromodichloromethane	43	
10061-01-5	cis-1,3-Dichloropropene	47	
108-10-1	4-Methyl-2-pentanone	77	
108-88-3	Toluene	280	E
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	39	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8B7243.D

Level: (TRACE/LOW/MED) LOW Date Received: 12/21/2012

% Moisture: not dec. Date Analyzed: 12/24/2012

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
127-18-4	Tetrachloroethene	2300	E
591-78-6	2-Hexanone	86	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	88	
179601-23-1	m,p-Xylene	200	
95-47-6	o-Xylene	110	
1330-20-7	Xylene (Total)	310	
100-42-5	Styrene	50	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	54	
108-86-1	Bromobenzene	46	
96-18-4	1,2,3-Trichloropropane	54	
103-65-1	n-Propylbenzene	52	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	62	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	110	
135-98-8	sec-Butylbenzene	44	
99-87-6	4-Isopropyltoluene	45	
541-73-1	1,3-Dichlorobenzene	45	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	46	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	52	
120-82-1	1,2,4-Trichlorobenzene	42	
87-68-3	Hexachlorobutadiene	24	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	67	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-69910	100	100	100	101				0
02	MB-69910	103	98	100	96				0
03	TRIP BLANK	102	101	101	98				0
04	MW-4	103	102	102	97				0
05	MW-5	91	98	95	100				0
06	DUP-1	85	99	96	98				0
07	MW-5MS	88	104	96	100				0
08	MW-5MSD	87	104	98	98				0
09	LCS-69949	101	102	100	101				0
10	LCSD-69949	101	103	100	100				0
11	MB-69949	100	100	102	100				0
12	MW-4DL	99	99	100	98				0
13	MW-5DL	100	101	101	99				0
14	DUP-1DL	99	103	101	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

som12.12.17.A

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	32.0052	64		30-155
Chloromethane	50.0000	0.0000	48.6498	97		40-125
Vinyl chloride	50.0000	5867.5471	6084.9634	435	*	50-145
Bromomethane	50.0000	0.0000	37.2577	75		30-145
Chloroethane	50.0000	0.0000	54.3873	109		60-135
Trichlorofluoromethane	50.0000	0.0000	34.6772	69		60-145
1,1-Dichloroethene	50.0000	2679.7889	2158.9655	-1042	*	70-130
Acetone	50.0000	134.9548	205.2097	141	*	40-140
Iodomethane	50.0000	0.0000	44.5801	89		72-121
Carbon disulfide	50.0000	3.5307	45.2041	83		35-160
Methylene chloride	50.0000	597.7820	673.9541	152	*	55-140
trans-1,2-Dichloroethene	50.0000	319.0776	312.1001	-14	*	60-140
Methyl tert-butyl ether	50.0000	0.0000	24.2153	48	*	65-125
1,1-Dichloroethane	50.0000	1652.3340	1842.5907	381	*	70-135
Vinyl acetate	50.0000	0.0000	41.9286	84		38-163
2-Butanone	50.0000	0.0000	1092.9929	2186	*	30-150
cis-1,2-Dichloroethene	50.0000	9949.4366	10373.1099	847	*	70-125
2,2-Dichloropropane	50.0000	0.0000	5.6447	11	*	70-135
Bromochloromethane	50.0000	0.0000	40.2329	80		65-130
Chloroform	50.0000	3.5004	41.8408	77		65-135
1,1,1-Trichloroethane	50.0000	4989.9970	4618.6039	-743	*	65-130
1,1-Dichloropropene	50.0000	0.0000	39.7329	79		75-130
Carbon tetrachloride	50.0000	0.0000	32.8890	66		65-140
1,2-Dichloroethane	50.0000	7.9686	47.6491	79		70-130
Benzene	50.0000	8.2290	50.5392	85		80-120
Trichloroethene	50.0000	11026.9762	9161.9552	-3730	*	70-125
1,2-Dichloropropane	50.0000	0.0000	20.5170	41	*	75-125
Dibromomethane	50.0000	0.0000	40.3805	81		75-125
Bromodichloromethane	50.0000	0.0000	39.5598	79		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	43.5928	87		70-130
4-Methyl-2-pentanone	50.0000	22.8852	76.3553	107		60-135
Toluene	50.0000	301.4170	310.9594	19	*	75-120
trans-1,3-Dichloropropene	50.0000	0.0000	50.2490	100		55-140
1,1,2-Trichloroethane	50.0000	8.0654	52.8200	90		75-125
1,3-Dichloropropane	50.0000	0.0000	33.1105	66	*	75-125
Tetrachloroethene	50.0000	2666.3252	2495.6261	-341	*	45-150
2-Hexanone	50.0000	0.0000	79.2503	159	*	55-130
Dibromochloromethane	50.0000	0.0000	46.9566	94		60-135
1,2-Dibromoethane	50.0000	0.0000	46.0441	92		80-120
Chlorobenzene	50.0000	0.5964	44.0054	87		80-120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	44.6332	89		80-130
Ethylbenzene	50.0000	48.1491	91.1417	86		75-125
m,p-Xylene	100.0000	128.8443	214.3351	85		75-130
o-Xylene	50.0000	72.1553	116.1934	88		80-120

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	200.9996	330.5285	86		81-121
Styrene	50.0000	0.0000	46.0120	92		65-135
Bromoform	50.0000	0.0000	50.1932	100		70-130
Isopropylbenzene	50.0000	6.2956	48.1670	84		75-125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.3049	97		65-130
Bromobenzene	50.0000	0.0000	41.8855	84		75-125
1,2,3-Trichloropropane	50.0000	0.0000	48.4140	97		75-125
n-Propylbenzene	50.0000	10.6823	51.4624	82		70-130
2-Chlorotoluene	50.0000	0.0000	41.3883	83		75-125
1,3,5-Trimethylbenzene	50.0000	26.4769	64.3977	76		75-130
4-Chlorotoluene	50.0000	0.0000	41.9033	84		75-130
tert-Butylbenzene	50.0000	0.0000	40.4790	81		70-130
1,2,4-Trimethylbenzene	50.0000	91.1976	128.8417	75		75-130
sec-Butylbenzene	50.0000	4.0289	41.3013	75		70-125
4-Isopropyltoluene	50.0000	0.0000	42.3151	85		75-130
1,3-Dichlorobenzene	50.0000	0.0000	40.5675	81		75-125
1,4-Dichlorobenzene	50.0000	0.5203	40.6263	80		75-125
n-Butylbenzene	50.0000	8.6335	44.3668	71		70-135
1,2-Dichlorobenzene	50.0000	0.0000	41.3302	83		70-120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	47.5758	95		50-130
1,2,4-Trichlorobenzene	50.0000	1.1516	37.0964	72		65-135
Hexachlorobutadiene	50.0000	0.0000	22.0051	44	*	50-140
1,2,3-Trichlorobenzene	50.0000	0.7827	36.0419	71		55-140
Naphthalene	50.0000	19.6015	65.1896	91		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	28.0031	56		13		0-40	30-155
Chloromethane	50.0000	51.2117	102		5		0-40	40-125
Vinyl chloride	50.0000	4918.6791	-1898	*	-319	*	0-40	50-145
Bromomethane	50.0000	49.4104	99		28		0-40	30-145
Chloroethane	50.0000	51.9755	104		5		0-40	60-135
Trichlorofluoromethane	50.0000	32.4499	65		7		0-40	60-145
1,1-Dichloroethene	50.0000	1956.1752	-1447	*	-33	*	0-40	70-130
Acetone	50.0000	217.7481	166	*	16		0-40	40-140
Iodomethane	50.0000	34.1893	68	*	26		0-40	72-121
Carbon disulfide	50.0000	49.7994	93		10		0-40	35-160
Methylene chloride	50.0000	686.7141	178	*	15		0-40	55-140
trans-1,2-Dichloroethene	50.0000	254.8476	-128	*	-161	*	0-40	60-140
Methyl tert-butyl ether	50.0000	28.0874	56	*	15		0-40	65-125
1,1-Dichloroethane	50.0000	1774.0128	243	*	44	*	0-40	70-135
Vinyl acetate	50.0000	48.1514	96		14		0-40	38-163
2-Butanone	50.0000	651.2115	1302	*	51	*	0-40	30-150
cis-1,2-Dichloroethene	50.0000	7766.9851	-4365	*	-296	*	0-40	70-125
2,2-Dichloropropane	50.0000	7.5732	15	*	29		0-40	70-135
Bromochloromethane	50.0000	44.3778	89		10		0-40	65-130

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

Chloroform	50.0000	44.5932	82		7		0-40	65-135
1,1,1-Trichloroethane	50.0000	3965.8249	-2048	*	-94	*	0-40	65-130
1,1-Dichloropropene	50.0000	42.0624	84		6		0-40	75-130
Carbon tetrachloride	50.0000	32.3441	65	*	2		0-40	65-140
1,2-Dichloroethane	50.0000	50.3805	85		7		0-40	70-130
Benzene	50.0000	55.8489	95		12		0-40	80-120
Trichloroethene	50.0000	8173.6200	-5707	*	-42	*	0-40	70-125
1,2-Dichloropropane	50.0000	18.4976	37	*	10		0-40	75-125
Dibromomethane	50.0000	42.2469	84		5		0-40	75-125
Bromodichloromethane	50.0000	42.6096	85		7		0-40	75-120
cis-1,3-Dichloropropene	50.0000	47.2755	95		8		0-40	70-130
4-Methyl-2-pentanone	50.0000	77.3910	109		2		0-40	60-135
Toluene	50.0000	276.1822	-50	*	-443	*	0-40	75-120
trans-1,3-Dichloropropene	50.0000	52.7487	105		5		0-40	55-140
1,1,2-Trichloroethane	50.0000	54.3174	93		3		0-40	75-125
1,3-Dichloropropane	50.0000	39.1359	78		17		0-40	75-125
Tetrachloroethene	50.0000	2271.6342	-789	*	-79	*	0-40	45-150
2-Hexanone	50.0000	85.5513	171	*	8		0-40	55-130
Dibromochloromethane	50.0000	50.5647	101		7		0-40	60-135
1,2-Dibromoethane	50.0000	50.5227	101		9		0-40	80-120
Chlorobenzene	50.0000	48.3288	95		9		0-40	80-120
1,1,1,2-Tetrachloroethane	50.0000	48.8073	98		9		0-40	80-130
Ethylbenzene	50.0000	87.8282	79		8		0-40	75-125
m,p-Xylene	100.0000	200.0652	71	*	18		0-40	75-130
o-Xylene	50.0000	108.7446	73	*	18		0-40	80-120
Xylene (Total)	150.0000	308.8098	72	*	18		0-40	81-121
Styrene	50.0000	50.1518	100		9		0-40	65-135
Bromoform	50.0000	53.8372	108		7		0-40	70-130
Isopropylbenzene	50.0000	49.8770	87		4		0-40	75-125
1,1,2,2-Tetrachloroethane	50.0000	54.0207	108		11		0-40	65-130
Bromobenzene	50.0000	46.1904	92		10		0-40	75-125
1,2,3-Trichloropropane	50.0000	53.9158	108		11		0-40	75-125
n-Propylbenzene	50.0000	52.0006	83		1		0-40	70-130
2-Chlorotoluene	50.0000	45.8862	92		10		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	62.2206	71	*	6		0-40	75-130
4-Chlorotoluene	50.0000	46.4605	93		10		0-40	75-130
tert-Butylbenzene	50.0000	44.3310	89		9		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	112.6245	43	*	55	*	0-40	75-130
sec-Butylbenzene	50.0000	43.8995	80		7		0-40	70-125
4-Isopropyltoluene	50.0000	44.5673	89		5		0-40	75-130
1,3-Dichlorobenzene	50.0000	44.7899	90		10		0-40	75-125
1,4-Dichlorobenzene	50.0000	44.8923	89		10		0-40	75-125
n-Butylbenzene	50.0000	46.2362	75		5		0-40	70-135
1,2-Dichlorobenzene	50.0000	45.6351	91		10		0-40	70-120
1,2-Dibromo-3-chloropropan	50.0000	52.4704	105		10		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	42.1854	82		13		0-40	65-135
Hexachlorobutadiene	50.0000	24.1573	48	*	9		0-40	50-140

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	41.5903	82		15		0-40	55-140
Naphthalene	50.0000	66.8138	94		4		0-40	55-140

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

* Values outside of QC limits

RPD: 11 out of 68 outside limits

Spike Recovery: 42 out of 136 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCS-69910 LCS Lot No.:

Date Extracted: 12/24/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	39.3899	79		30 - 155
Chloromethane	50.0000	0.0000	40.5514	81		40 - 125
Vinyl chloride	50.0000	0.0000	39.8027	80		50 - 145
Bromomethane	50.0000	0.0000	43.8353	88		30 - 145
Chloroethane	50.0000	0.0000	37.6736	75		60 - 135
Trichlorofluoromethane	50.0000	0.0000	48.3518	97		60 - 145
1,1-Dichloroethene	50.0000	0.0000	43.3058	87		70 - 130
Acetone	50.0000	0.0000	52.3776	105		40 - 140
Iodomethane	50.0000	0.0000	35.9529	72	*	72 - 121
Carbon disulfide	50.0000	0.0000	41.9778	84		35 - 160
Methylene chloride	50.0000	0.0000	39.1949	78		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	43.9484	88		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	46.8064	94		65 - 125
1,1-Dichloroethane	50.0000	0.0000	45.3694	91		70 - 135
Vinyl acetate	50.0000	0.0000	50.6316	101		38 - 163
2-Butanone	50.0000	0.0000	50.5819	101		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	45.1088	90		70 - 125
2,2-Dichloropropane	50.0000	0.0000	59.0786	118		70 - 135
Bromochloromethane	50.0000	0.0000	43.9815	88		65 - 130
Chloroform	50.0000	0.0000	44.5735	89		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	47.2641	95		65 - 130
1,1-Dichloropropene	50.0000	0.0000	44.7014	89		75 - 130
Carbon tetrachloride	50.0000	0.0000	49.3723	99		65 - 140
1,2-Dichloroethane	50.0000	0.0000	47.5974	95		70 - 130
Benzene	50.0000	0.0000	44.7704	90		80 - 120
Trichloroethene	50.0000	0.0000	44.5173	89		70 - 125
1,2-Dichloropropane	50.0000	0.0000	44.6655	89		75 - 125
Dibromomethane	50.0000	0.0000	47.3032	95		75 - 125
Bromodichloromethane	50.0000	0.0000	47.1113	94		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	48.9662	98		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	47.2362	94		60 - 135
Toluene	50.0000	0.0000	45.1235	90		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.7723	102		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	46.8892	94		75 - 125
1,3-Dichloropropane	50.0000	0.0000	47.8521	96		75 - 125
Tetrachloroethene	50.0000	0.0000	39.9887	80		45 - 150
2-Hexanone	50.0000	0.0000	50.5140	101		55 - 130
Dibromochloromethane	50.0000	0.0000	49.5079	99		60 - 135
1,2-Dibromoethane	50.0000	0.0000	47.8675	96		80 - 120
Chlorobenzene	50.0000	0.0000	46.0913	92		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	48.7905	98		80 - 130
Ethylbenzene	50.0000	0.0000	46.3989	93		75 - 125
m,p-Xylene	100.0000	0.0000	94.4147	94		75 - 130
o-Xylene	50.0000	0.0000	46.2098	92		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCS-69910 LCS Lot No.:

Date Extracted: 12/24/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	140.6245	94		81 - 121
Styrene	50.0000	0.0000	45.8099	92		65 - 135
Bromoform	50.0000	0.0000	51.1199	102		70 - 130
Isopropylbenzene	50.0000	0.0000	46.4913	93		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	47.9806	96		65 - 130
Bromobenzene	50.0000	0.0000	46.7397	93		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	49.5406	99		75 - 125
n-Propylbenzene	50.0000	0.0000	47.1507	94		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.9608	94		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.2848	93		75 - 130
4-Chlorotoluene	50.0000	0.0000	47.7155	95		75 - 130
tert-Butylbenzene	50.0000	0.0000	49.6251	99		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	48.2920	97		75 - 130
sec-Butylbenzene	50.0000	0.0000	47.6332	95		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.8507	98		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	46.7238	93		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.8962	94		75 - 125
n-Butylbenzene	50.0000	0.0000	49.4992	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.6905	95		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	50.2435	100		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	47.9911	96		65 - 135
Hexachlorobutadiene	50.0000	0.0000	51.3175	103		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	47.3844	95		55 - 140
Naphthalene	50.0000	0.0000	48.3960	97		55 - 140

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

* Values outside of QC limits

Spike Recovery: 1 out of 68 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCS-69949 LCS Lot No.:

Date Extracted: 12/27/2012 Date Analyzed (1): 12/27/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	55.4991	111		30 - 155
Chloromethane	50.0000	0.0000	47.8255	96		40 - 125
Vinyl chloride	50.0000	0.0000	50.1978	100		50 - 145
Bromomethane	50.0000	0.0000	48.5600	97		30 - 145
Chloroethane	50.0000	0.0000	49.5627	99		60 - 135
Trichlorofluoromethane	50.0000	0.0000	57.5914	115		60 - 145
1,1-Dichloroethene	50.0000	0.0000	49.5636	99		70 - 130
Acetone	50.0000	0.0000	42.3310	85		40 - 140
Iodomethane	50.0000	0.0000	51.4633	103		72 - 121
Carbon disulfide	50.0000	0.0000	50.4286	101		35 - 160
Methylene chloride	50.0000	0.0000	46.5610	93		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	50.9383	102		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	51.5791	103		65 - 125
1,1-Dichloroethane	50.0000	0.0000	52.8533	106		70 - 135
Vinyl acetate	50.0000	0.0000	51.4239	103		38 - 163
2-Butanone	50.0000	0.0000	48.9467	98		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	50.1694	100		70 - 125
2,2-Dichloropropane	50.0000	0.0000	52.1188	104		70 - 135
Bromochloromethane	50.0000	0.0000	51.7540	104		65 - 130
Chloroform	50.0000	0.0000	51.7459	103		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	53.4138	107		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.6915	103		75 - 130
Carbon tetrachloride	50.0000	0.0000	55.5484	111		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.0850	104		70 - 130
Benzene	50.0000	0.0000	51.8845	104		80 - 120
Trichloroethene	50.0000	0.0000	52.1522	104		70 - 125
1,2-Dichloropropane	50.0000	0.0000	51.4131	103		75 - 125
Dibromomethane	50.0000	0.0000	50.7017	101		75 - 125
Bromodichloromethane	50.0000	0.0000	53.3848	107		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	52.9373	106		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	49.8896	100		60 - 135
Toluene	50.0000	0.0000	52.1610	104		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.9076	106		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.0354	102		75 - 125
1,3-Dichloropropane	50.0000	0.0000	52.2294	104		75 - 125
Tetrachloroethene	50.0000	0.0000	53.4639	107		45 - 150
2-Hexanone	50.0000	0.0000	50.0529	100		55 - 130
Dibromochloromethane	50.0000	0.0000	52.8305	106		60 - 135
1,2-Dibromoethane	50.0000	0.0000	52.9741	106		80 - 120
Chlorobenzene	50.0000	0.0000	52.5357	105		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.8371	104		80 - 130
Ethylbenzene	50.0000	0.0000	53.2131	106		75 - 125
m,p-Xylene	100.0000	0.0000	106.5222	107		75 - 130
o-Xylene	50.0000	0.0000	52.5251	105		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCS-69949 LCS Lot No.:

Date Extracted: 12/27/2012 Date Analyzed (1): 12/27/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	159.0474	106		81 - 121
Styrene	50.0000	0.0000	54.1478	108		65 - 135
Bromoform	50.0000	0.0000	53.7726	108		70 - 130
Isopropylbenzene	50.0000	0.0000	53.8363	108		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.3609	101		65 - 130
Bromobenzene	50.0000	0.0000	50.6704	101		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	51.3296	103		75 - 125
n-Propylbenzene	50.0000	0.0000	52.6916	105		70 - 130
2-Chlorotoluene	50.0000	0.0000	52.3031	105		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	53.3373	107		75 - 130
4-Chlorotoluene	50.0000	0.0000	51.4571	103		75 - 130
tert-Butylbenzene	50.0000	0.0000	53.4290	107		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	52.8213	106		75 - 130
sec-Butylbenzene	50.0000	0.0000	54.3758	109		70 - 125
4-Isopropyltoluene	50.0000	0.0000	53.5813	107		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	51.8628	104		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	51.3741	103		75 - 125
n-Butylbenzene	50.0000	0.0000	53.3880	107		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	51.0658	102		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	45.0220	90		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	49.9402	100		65 - 135
Hexachlorobutadiene	50.0000	0.0000	51.6721	103		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	46.9608	94		55 - 140
Naphthalene	50.0000	0.0000	47.7149	95		55 - 140

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

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCSD-69949 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	53.9615	108		3		40	30 - 155
Chloromethane	50.0000	47.7038	95		1		40	40 - 125
Vinyl chloride	50.0000	49.3537	99		1		40	50 - 145
Bromomethane	50.0000	48.0589	96		1		40	30 - 145
Chloroethane	50.0000	49.8297	100		1		40	60 - 135
Trichlorofluoromethane	50.0000	52.7896	106		8		40	60 - 145
1,1-Dichloroethene	50.0000	47.0072	94		5		40	70 - 130
Acetone	50.0000	42.0140	84		1		40	40 - 140
Iodomethane	50.0000	54.5335	109		6		40	72 - 121
Carbon disulfide	50.0000	50.8088	102		1		40	35 - 160
Methylene chloride	50.0000	45.3805	91		2		40	55 - 140
trans-1,2-Dichloroethene	50.0000	48.8671	98		4		40	60 - 140
Methyl tert-butyl ether	50.0000	50.3503	101		2		40	65 - 125
1,1-Dichloroethane	50.0000	51.0312	102		4		40	70 - 135
Vinyl acetate	50.0000	49.6417	99		4		40	38 - 163
2-Butanone	50.0000	47.8299	96		2		40	30 - 150
cis-1,2-Dichloroethene	50.0000	48.5106	97		3		40	70 - 125
2,2-Dichloropropane	50.0000	50.6235	101		3		40	70 - 135
Bromochloromethane	50.0000	49.0186	98		6		40	65 - 130
Chloroform	50.0000	50.2522	101		2		40	65 - 135
1,1,1-Trichloroethane	50.0000	51.8846	104		3		40	65 - 130
1,1-Dichloropropene	50.0000	49.8800	100		3		40	75 - 130
Carbon tetrachloride	50.0000	54.0081	108		3		40	65 - 140
1,2-Dichloroethane	50.0000	50.8079	102		2		40	70 - 130
Benzene	50.0000	49.9670	100		4		40	80 - 120
Trichloroethene	50.0000	49.6681	99		5		40	70 - 125
1,2-Dichloropropane	50.0000	49.8012	100		3		40	75 - 125
Dibromomethane	50.0000	49.4182	99		2		40	75 - 125
Bromodichloromethane	50.0000	50.9179	102		5		40	75 - 120
cis-1,3-Dichloropropene	50.0000	50.8755	102		4		40	70 - 130
4-Methyl-2-pentanone	50.0000	50.0006	100		0		40	60 - 135
Toluene	50.0000	50.5804	101		3		40	75 - 120
trans-1,3-Dichloropropene	50.0000	50.8767	102		4		40	55 - 140
1,1,2-Trichloroethane	50.0000	50.2948	101		1		40	75 - 125
1,3-Dichloropropane	50.0000	49.9617	100		4		40	75 - 125
Tetrachloroethene	50.0000	49.6512	99		8		40	45 - 150
2-Hexanone	50.0000	48.1879	96		4		40	55 - 130
Dibromochloromethane	50.0000	50.9969	102		4		40	60 - 135
1,2-Dibromoethane	50.0000	50.9721	102		4		40	80 - 120
Chlorobenzene	50.0000	49.9437	100		5		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	49.9301	100		4		40	80 - 130
Ethylbenzene	50.0000	49.8118	100		6		40	75 - 125
m,p-Xylene	100.0000	100.9441	101		6		40	75 - 130
o-Xylene	50.0000	49.8417	100		5		40	80 - 120
Xylene (Total)	150.0000	150.7858	101		5		40	81 - 121
Styrene	50.0000	51.6585	103		5		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCSD-69949 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	52.0797	104		4		40	70 - 130
Isopropylbenzene	50.0000	50.8935	102		6		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	48.4203	97		4		40	65 - 130
Bromobenzene	50.0000	49.0370	98		3		40	75 - 125
1,2,3-Trichloropropane	50.0000	49.0335	98		5		40	75 - 125
n-Propylbenzene	50.0000	50.1431	100		5		40	70 - 130
2-Chlorotoluene	50.0000	50.0830	100		5		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	50.7290	101		6		40	75 - 130
4-Chlorotoluene	50.0000	49.5739	99		4		40	75 - 130
tert-Butylbenzene	50.0000	50.8929	102		5		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	50.5946	101		5		40	75 - 130
sec-Butylbenzene	50.0000	50.4943	101		8		40	70 - 125
4-Isopropyltoluene	50.0000	50.6650	101		6		40	75 - 130
1,3-Dichlorobenzene	50.0000	49.9983	100		4		40	75 - 125
1,4-Dichlorobenzene	50.0000	49.4893	99		4		40	75 - 125
n-Butylbenzene	50.0000	50.5673	101		6		40	70 - 135
1,2-Dichlorobenzene	50.0000	49.0514	98		4		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	45.8831	92		2		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	48.7079	97		3		40	65 - 135
Hexachlorobutadiene	50.0000	47.8595	96		7		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	46.0638	92		2		40	55 - 140
Naphthalene	50.0000	47.5067	95		0		40	55 - 140

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-69949

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab File ID: V1N0016.D Lab Sample ID: MB-69949

Instrument ID: V1

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/27/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 17:06

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-69949	LCS-69949	V1N0012.D	15:31
02	LCSD-69949	LCSD-69949	V1N0013.D	15:55
03	MW-4DL	L2626-01ADL	V1N0019.D	18:17
04	MW-5DL	L2626-02ADL	V1N0020.D	18:41
05	DUP-1DL	L2626-03ADL	V1N0021.D	19:05

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
MB-69910

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab File ID: V8B7226.D Lab Sample ID: MB-69910

Instrument ID: V10

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/24/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 13:05

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-69910	LCS-69910	V8B7223.D	11:42
02	TRIP BLANK	L2626-04A	V8B7231.D	15:23
03	MW-4	L2626-01A	V8B7238.D	18:36
04	MW-5	L2626-02A	V8B7239.D	19:03
05	DUP-1	L2626-03A	V8B7240.D	19:30
06	MW-5MS	L2626-02AMS	V8B7242.D	20:25
07	MW-5MSD	L2626-02AMSD	V8B7243.D	20:52

COMMENTS:

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/27/2012 12/27/2012

EPA Sample No.(VSTD#####): VSTD0501C Date Analyzed: 12/27/2012

Lab File ID (Standard): V1N0002.D Time Analyzed: 11:50

Instrument ID: V1 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	2188857		4.644		1251994		7.53		435159		10.081	
	UPPER LIMIT	4377714		5.144		2503988		8.03		870318		10.581	
	LOWER LIMIT	1094429		4.144		625997		7.03		217580		9.581	
	EPA SAMPLE NO.												
01	LCS-69949	1981826		4.644		1140110		7.530		399341		10.081	
02	LCSD-69949	2003469		4.645		1168200		7.531		406857		10.082	
03	MB-69949	1982725		4.640		1130353		7.526		391918		10.077	
04	MW-4DL	1923285		4.636		1098684		7.522		377920		10.073	
05	MW-5DL	2005940		4.625		1154779		7.520		395294		10.081	
06	DUP-1DL	2057903		4.635		1178625		7.530		410687		10.082	

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.: L2626 Mod. Ref No.: SDG No.: SL2626

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####): VSTD05010P Date Analyzed: 12/24/2012

Lab File ID (Standard): V8B7222.D Time Analyzed: 11:15

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

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	526942		5.3		452355		8.287		233414		10.783	
	UPPER LIMIT	1053884		5.8		904710		8.787		466828		11.283	
	LOWER LIMIT	263471		4.8		226178		7.787		116707		10.283	
	EPA SAMPLE NO.												
01	LCS-69910	541637		5.300		466580		8.287		237889		10.783	
02	MB-69910	501040		5.300		433287		8.291		205566		10.782	
03	TRIP BLANK	510327		5.304		434563		8.287		203708		10.782	
04	MW-4	582187		5.304		487566		8.287		234384		10.783	
05	MW-5	609529		5.329		616095		8.297		325821		10.783	
06	DUP-1	751235		5.323		671459		8.297		349916		10.782	
07	MW-5MS	755672		5.326		669261		8.297		350025		10.782	
08	MW-5MSD	824542		5.320		694039		8.297		352130		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 : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L2625

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: 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-69884 in batch 69884, Percent Recovery is outside QC Limits, recovery is above criteria for Hexachlorobutadiene at 109% with criteria of (25-105).

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:_____1/9/2013_____

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

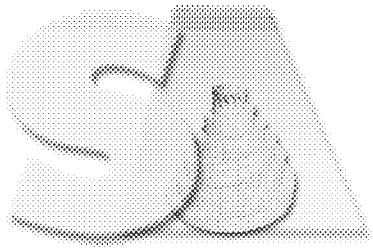
E — This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2144.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2144.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	4.3	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	1.6	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2144.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	112-84-5	13-Docosenamide, (Z)-	11.187	12	NJ
02	6311-48-4	Dibenzylidene 4,4'-biphenyle	13.872	34	NJ

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2145.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	12	
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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	1.6	J
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	5.7	J
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2145.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	31	
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	4.4	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	2.5	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2145.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (3.68983)	3.690	14	J
02	620-14-4	Benzene, 1-ethyl-3-methyl-	3.995	19	NJ
03	526-73-8	Benzene, 1,2,3-trimethyl- (4	4.066	16	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	4.136	20	NJ
05	526-73-8	Benzene, 1,2,3-trimethyl- (4	4.260	48	NJ
06	526-73-8	Benzene, 1,2,3-trimethyl- (4	4.465	44	NJ
07	934-74-7	Benzene, 1-ethyl-3,5-dimethy	4.695	19	NJ
08	1758-88-9	Benzene, 2-ethyl-1,4-dimethy	4.883	15	NJ
09	488-23-3	Benzene, 1,2,3,4-tetramethyl	5.112	16	NJ
10	149-57-5	Hexanoic acid, 2-ethyl-	5.159	26	NJ
11		Unknown (5.24098)	5.241	45	J
12	527-84-4	Benzene, 1-methyl-2-(1-methy	5.306	14	NJ
13	54446-78-5	Ethanol, 1-(2-butoxyethoxy)-	5.470	100	NJ
14	95-16-9	Benzothiazole	5.764	8.5	NJ
15		Unknown (5.84028)	5.840	7.6	J
16		Unknown (5.86967)	5.870	12	J
17		Unknown (5.91667)	5.917	45	J
18	112-84-5	13-Docosenamide, (Z)-	11.205	13	NJ

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2146.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2146.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	4.1	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	1.6	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2625-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2146.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	112-84-5	13-Docosenamide, (Z)-	11.187	15	NJ

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2142.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2142.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2142.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2143.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	43	
111-44-4	Bis(2-chloroethyl)ether	42	
95-57-8	2-Chlorophenol	42	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	43	
95-50-1	1,2-Dichlorobenzene	43	
95-48-7	2-Methylphenol	42	
108-60-1	2,2´-oxybis(1-Chloropropane)	40	
106-44-5	4-Methylphenol	42	
621-64-7	N-Nitroso-di-n-propylamine	42	
67-72-1	Hexachloroethane	45	
98-95-3	Nitrobenzene	50	
78-59-1	Isophorone	46	
88-75-5	2-Nitrophenol	50	
105-67-9	2,4-Dimethylphenol	51	
120-83-2	2,4-Dichlorophenol	48	
120-82-1	1,2,4-Trichlorobenzene	48	
91-20-3	Naphthalene	46	
106-47-8	4-Chloroaniline	47	
111-91-1	Bis(2-chloroethoxy)methane	47	
87-68-3	Hexachlorobutadiene	54	
59-50-7	4-Chloro-3-methylphenol	49	
91-57-6	2-Methylnaphthalene	48	
77-47-4	Hexachlorocyclopentadiene	57	
88-06-2	2,4,6-Trichlorophenol	49	
95-95-4	2,4,5-Trichlorophenol	46	
91-58-7	2-Chloronaphthalene	44	
88-74-4	2-Nitroaniline	48	
131-11-3	Dimethylphthalate	45	
208-96-8	Acenaphthylene	42	
606-20-2	2,6-Dinitrotoluene	46	
99-09-2	3-Nitroaniline	44	
83-32-9	Acenaphthene	44	
51-28-5	2,4-Dinitrophenol	47	
100-02-7	4-Nitrophenol	50	
132-64-9	Dibenzofuran	45	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2143.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	48	
84-66-2	Diethylphthalate	47	
7005-72-3	4-Chlorophenyl-phenylether	47	
86-73-7	Fluorene	46	
100-01-6	4-Nitroaniline	39	
534-52-1	4,6-Dinitro-2-methylphenol	43	
86-30-6	N-Nitrosodiphenylamine	41	
101-55-3	4-Bromophenyl-phenylether	46	
118-74-1	Hexachlorobenzene	47	
87-86-5	Pentachlorophenol	37	
85-01-8	Phenanthrene	42	
120-12-7	Anthracene	42	
86-74-8	Carbazole	40	
84-74-2	Di-n-butylphthalate	43	
206-44-0	Fluoranthene	44	
129-00-0	Pyrene	45	
85-68-7	Butylbenzylphthalate	46	
91-94-1	3,3´-Dichlorobenzidine	35	
56-55-3	Benzo(a)anthracene	47	
218-01-9	Chrysene	46	
117-81-7	Bis(2-ethylhexyl)phthalate	45	
117-84-0	Di-n-octylphthalate	48	
205-99-2	Benzo(b)fluoranthene	53	
207-08-9	Benzo(k)fluoranthene	47	
50-32-8	Benzo(a)pyrene	50	
193-39-5	Indeno(1,2,3-cd)pyrene	52	
53-70-3	Dibenzo(a,h)anthracene	52	
191-24-2	Benzo(g,h,i)perylene	52	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-69884	101	88	105	89	84	99			0
02	LCS-69884	94	87	100	83	81	97			0
03	MW-1	83	80	70	17	28	91			0
04	MW-2	66	67	54	16	25	89			0
05	MW-3	70	64	55	14	24	76			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-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69884 LCS Lot No.: A087697

Date Extracted: 12/23/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	42.5178	85		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	42.0982	84		35 - 110
2-Chlorophenol	50.0000	0.0000	42.2882	85		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	43.3445	87		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	42.7491	85		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	43.0440	86		35 - 100
2-Methylphenol	50.0000	0.0000	42.1585	84		40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	40.1335	80		30 - 123
4-Methylphenol	50.0000	0.0000	41.5398	83		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	41.6621	83		35 - 130
Hexachloroethane	50.0000	0.0000	44.9734	90		30 - 95
Nitrobenzene	50.0000	0.0000	49.7800	100		45 - 110
Isophorone	50.0000	0.0000	46.4122	93		50 - 110
2-Nitrophenol	50.0000	0.0000	49.9161	100		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	51.3306	103		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	47.5615	95		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	48.4302	97		35 - 105
Naphthalene	50.0000	0.0000	46.4896	93		40 - 100
4-Chloroaniline	50.0000	0.0000	46.7344	93		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	47.1254	94		45 - 105
Hexachlorobutadiene	50.0000	0.0000	54.3739	109	*	25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	48.5995	97		45 - 110
2-Methylnaphthalene	50.0000	0.0000	47.8715	96		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	57.2759	115		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	48.8796	98		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	46.1445	92		50 - 110
2-Chloronaphthalene	50.0000	0.0000	44.1182	88		50 - 105
2-Nitroaniline	50.0000	0.0000	48.1876	96		50 - 115
Dimethylphthalate	50.0000	0.0000	45.4239	91		25 - 125
Acenaphthylene	50.0000	0.0000	42.0921	84		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	45.9318	92		50 - 115
3-Nitroaniline	50.0000	0.0000	44.3688	89		20 - 125
Acenaphthene	50.0000	0.0000	44.2345	88		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	46.9733	94		15 - 140
4-Nitrophenol	50.0000	0.0000	50.1719	100		0 - 125
Dibenzofuran	50.0000	0.0000	45.3719	91		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	47.9760	96		50 - 120
Diethylphthalate	50.0000	0.0000	46.6562	93		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	47.4522	95		50 - 110
Fluorene	50.0000	0.0000	45.5418	91		50 - 110
4-Nitroaniline	50.0000	0.0000	39.4330	79		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	42.5188	85		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	41.2587	83		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	45.8962	92		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69884 LCS Lot No.: A087697

Date Extracted: 12/23/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	47.4031	95		50 - 110
Pentachlorophenol	50.0000	0.0000	37.1144	74		40 - 115
Phenanthrene	50.0000	0.0000	42.2089	84		50 - 115
Anthracene	50.0000	0.0000	42.4953	85		55 - 110
Carbazole	50.0000	0.0000	40.2672	81		50 - 115
Di-n-butylphthalate	50.0000	0.0000	42.8442	86		55 - 115
Fluoranthene	50.0000	0.0000	44.2488	88		55 - 115
Pyrene	50.0000	0.0000	44.8640	90		50 - 130
Butylbenzylphthalate	50.0000	0.0000	46.0215	92		45 - 115
3,3´-Dichlorobenzidine	50.0000	0.0000	35.3147	71		20 - 110
Benzo(a)anthracene	50.0000	0.0000	46.6139	93		55 - 110
Chrysene	50.0000	0.0000	46.1025	92		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	45.2491	90		40 - 125
Di-n-octylphthalate	50.0000	0.0000	47.5190	95		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	52.5667	105		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	46.9956	94		45 - 125
Benzo(a)pyrene	50.0000	0.0000	49.5452	99		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	52.0002	104		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	52.3527	105		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	51.5787	103		40 - 125

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

* Values outside of QC limits

Spike Recovery: 1 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab File ID: S6B2142.D Lab Sample ID: MB-69884

Instrument ID: S6 Date Extracted: 12/23/2012

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/24/2012

Level: (LOW/MED) LOW Time Analyzed: 12:35

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-69884	LCS-69884	S6B2143.D	12/24/2012
02	MW-1	L2625-01B	S6B2144.D	12/24/2012
03	MW-2	L2625-02B	S6B2145.D	12/24/2012
04	MW-3	L2625-03B	S6B2146.D	12/24/2012

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.: L2625 Mod. Ref No.: SDG No.: SL2625

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 12/18/2012 12/18/2012

EPA Sample No.(SSTD020##) SSTD0256H Date Analyzed: 12/24/2012

Lab File ID (Standard): S6B2141.D Time Analyzed: 11:59

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	96011		4.407		371117		5.523		277144		7.01	
	UPPER LIMIT	192022		4.907		742234		6.023		554288		7.51	
	LOWER LIMIT	48006		3.907		185559		5.023		138572		6.51	
	EPA SAMPLE NO.												
01	MB-69884	81578		4.401		308946		5.523		219027		7.004	
02	LCS-69884	97119		4.407		362819		5.529		258755		7.010	
03	MW-1	112683		4.407		388911		5.523		257903		7.004	
04	MW-2	128739		4.407		468486		5.523		325700		7.004	
05	MW-3	110591		4.407		402657		5.523		277686		7.004	

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.: L2625 Mod. Ref No.: SDG No.: SL2625

EPA Sample No.(SSTD020##) SSTD0256H Date Analyzed: 12/24/2012

Lab File ID (Standard): S6B2141.D Time Analyzed: 11:59

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	570383		8.238		719439		10.488		702679		11.922	
	UPPER LIMIT	1140766		8.738		1438878		10.988		1405358		12.422	
	LOWER LIMIT	285192		7.738		359720		9.988		351340		11.422	
	EPA SAMPLE NO.												
01	MB-69884	495849		8.238		589245		10.541		539562		11.998	
02	LCS-69884	569432		8.238		658185		10.494		589091		11.928	
03	MW-1	544345		8.238		544010		10.476		456382		11.898	
04	MW-2	677133		8.238		712422		10.482		610446		11.916	
05	MW-3	593806		8.238		610908		10.476		506737		11.898	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

* Semivolatile Organics *

REPORT NARRATIVE

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

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L2626

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: 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-69884 in batch 69884, Percent Recovery is outside QC Limits, recovery is above criteria for Hexachlorobutadiene at 109% with criteria of (25-105).

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

Matrix spikes were performed on samples: MW-5 (L2626-02BMS) and MW-5 (L2626-02BMSD).

Percent recoveries were within the QC limits with the following exceptions:

MW-5 (L2626-02BMS)Percent Recovery is outside QC Limits, recovery is below criteria for 3,3´-Dichlorobenzidine at 4% with criteria of (20-110).

MW-5 (L2626-02BMSD)Percent Recovery is outside QC Limits, recovery is below criteria for 3,3´-Dichlorobenzidine at 4% with criteria of (20-110).

Replicate RPDs were within the advisory QC limits.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

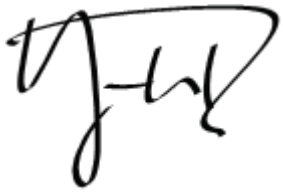
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

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:_____1/9/2013_____

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

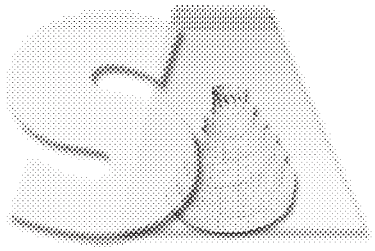
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2147.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2147.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	4.0	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	1.7	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2147.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	112-84-5	13-Docosenamide, (Z)-	11.187	12	NJ

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2148.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.2	J
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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	2.5	J
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	
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2148.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	1.4	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	4.0	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	1.9	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2148.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (3.69000)	3.690	17	J
02	620-14-4	Benzene, 1-ethyl-3-methyl-	4.001	17	NJ
03	526-73-8	Benzene, 1,2,3-trimethyl-	4.066	13	NJ
04	611-14-3	Benzene, 1-ethyl-2-methyl-	4.137	18	NJ
05	95-63-6	Benzene, 1,2,4-trimethyl- (4	4.260	47	NJ
06	95-63-6	Benzene, 1,2,4-trimethyl- (4	4.466	41	NJ
07		Unknown (4.65360)	4.654	8.8	J
08	934-80-5	Benzene, 4-ethyl-1,2-dimethy	4.695	16	NJ
09		Unknown (4.75935)	4.759	12	J
10	527-84-4	Benzene, 1-methyl-2-(1-methy	4.842	6.2	NJ
11	1120-21-4	Undecane	4.941	5.6	NJ
12	95-93-2	Benzene, 1,2,4,5-tetramethyl	5.112	6.2	NJ
13	20053-58-1	2,3-Epoxycarane, (E)-	5.306	13	NJ
14		Unknown (5.44680)	5.447	5.0	J
15		Unknown (6.34577)	6.346	5.5	J
16		Unknown (6.95095)	6.951	4.4	J
17	112-84-5	13-Docosenamide, (Z)-	11.187	13	NJ

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2151.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	4.5	J
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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	2.2	J
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	
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	J
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2151.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	1.7	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	4.4	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	1.4	J
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	2.0	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUP-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2151.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown (3.68993)	3.690	14	J
02	95-63-6	Benzene, 1,2,4-trimethyl-	3.995	18	NJ
03	622-96-8	Benzene, 1-ethyl-4-methyl-	4.025	8.9	NJ
04	108-67-8	Benzene, 1,3,5-trimethyl-	4.066	12	NJ
05	620-14-4	Benzene, 1-ethyl-3-methyl-	4.136	17	NJ
06	526-73-8	Benzene, 1,2,3-trimethyl- (4	4.260	49	NJ
07	526-73-8	Benzene, 1,2,3-trimethyl- (4	4.465	43	NJ
08	1074-43-7	Benzene, 1-methyl-3-propyl-	4.654	9.6	NJ
09	934-74-7	Benzene, 1-ethyl-3,5-dimethy	4.695	15	NJ
10		Unknown (4.75928)	4.759	13	J
11	535-77-3	Benzene, 1-methyl-3-(1-methy	4.842	7.8	NJ
12	488-23-3	Benzene, 1,2,3,4-tetramethyl	5.112	7.6	NJ
13		Unknown (5.30570)	5.306	14	J
14		Unknown (5.38208)	5.382	15	J
15		Unknown (5.45260)	5.453	5.7	J
16	112-05-0	Nonanoic acid	5.882	6.0	NJ
17		Unknown (6.38682)	6.387	6.0	J
18		Unknown (6.55720)	6.557	7.5	J
19	112-84-5	13-Docosenamide, (Z)-	11.199	12	NJ

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2142.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	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
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2142.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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
100-01-6	4-Nitroaniline	20	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
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	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

1K - FORM I SV-TIC

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2142.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[2]EPA-designated Registry Number.

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2143.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	43	
111-44-4	Bis(2-chloroethyl)ether	42	
95-57-8	2-Chlorophenol	42	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	43	
95-50-1	1,2-Dichlorobenzene	43	
95-48-7	2-Methylphenol	42	
108-60-1	2,2´-oxybis(1-Chloropropane)	40	
106-44-5	4-Methylphenol	42	
621-64-7	N-Nitroso-di-n-propylamine	42	
67-72-1	Hexachloroethane	45	
98-95-3	Nitrobenzene	50	
78-59-1	Isophorone	46	
88-75-5	2-Nitrophenol	50	
105-67-9	2,4-Dimethylphenol	51	
120-83-2	2,4-Dichlorophenol	48	
120-82-1	1,2,4-Trichlorobenzene	48	
91-20-3	Naphthalene	46	
106-47-8	4-Chloroaniline	47	
111-91-1	Bis(2-chloroethoxy)methane	47	
87-68-3	Hexachlorobutadiene	54	
59-50-7	4-Chloro-3-methylphenol	49	
91-57-6	2-Methylnaphthalene	48	
77-47-4	Hexachlorocyclopentadiene	57	
88-06-2	2,4,6-Trichlorophenol	49	
95-95-4	2,4,5-Trichlorophenol	46	
91-58-7	2-Chloronaphthalene	44	
88-74-4	2-Nitroaniline	48	
131-11-3	Dimethylphthalate	45	
208-96-8	Acenaphthylene	42	
606-20-2	2,6-Dinitrotoluene	46	
99-09-2	3-Nitroaniline	44	
83-32-9	Acenaphthene	44	
51-28-5	2,4-Dinitrophenol	47	
100-02-7	4-Nitrophenol	50	
132-64-9	Dibenzofuran	45	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-69884

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2143.D

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

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

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	48	
84-66-2	Diethylphthalate	47	
7005-72-3	4-Chlorophenyl-phenylether	47	
86-73-7	Fluorene	46	
100-01-6	4-Nitroaniline	39	
534-52-1	4,6-Dinitro-2-methylphenol	43	
86-30-6	N-Nitrosodiphenylamine	41	
101-55-3	4-Bromophenyl-phenylether	46	
118-74-1	Hexachlorobenzene	47	
87-86-5	Pentachlorophenol	37	
85-01-8	Phenanthrene	42	
120-12-7	Anthracene	42	
86-74-8	Carbazole	40	
84-74-2	Di-n-butylphthalate	43	
206-44-0	Fluoranthene	44	
129-00-0	Pyrene	45	
85-68-7	Butylbenzylphthalate	46	
91-94-1	3,3´-Dichlorobenzidine	35	
56-55-3	Benzo(a)anthracene	47	
218-01-9	Chrysene	46	
117-81-7	Bis(2-ethylhexyl)phthalate	45	
117-84-0	Di-n-octylphthalate	48	
205-99-2	Benzo(b)fluoranthene	53	
207-08-9	Benzo(k)fluoranthene	47	
50-32-8	Benzo(a)pyrene	50	
193-39-5	Indeno(1,2,3-cd)pyrene	52	
53-70-3	Dibenzo(a,h)anthracene	52	
191-24-2	Benzo(g,h,i)perylene	52	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02BMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2149.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	14	
111-44-4	Bis(2-chloroethyl)ether	35	
95-57-8	2-Chlorophenol	28	
541-73-1	1,3-Dichlorobenzene	33	
106-46-7	1,4-Dichlorobenzene	33	
95-50-1	1,2-Dichlorobenzene	34	
95-48-7	2-Methylphenol	24	
108-60-1	2,2´-oxybis(1-Chloropropane)	30	
106-44-5	4-Methylphenol	21	
621-64-7	N-Nitroso-di-n-propylamine	35	
67-72-1	Hexachloroethane	35	
98-95-3	Nitrobenzene	42	
78-59-1	Isophorone	38	
88-75-5	2-Nitrophenol	38	
105-67-9	2,4-Dimethylphenol	39	
120-83-2	2,4-Dichlorophenol	37	
120-82-1	1,2,4-Trichlorobenzene	39	
91-20-3	Naphthalene	53	
106-47-8	4-Chloroaniline	21	
111-91-1	Bis(2-chloroethoxy)methane	40	
87-68-3	Hexachlorobutadiene	40	
59-50-7	4-Chloro-3-methylphenol	34	
91-57-6	2-Methylnaphthalene	41	
77-47-4	Hexachlorocyclopentadiene	46	
88-06-2	2,4,6-Trichlorophenol	43	
95-95-4	2,4,5-Trichlorophenol	40	
91-58-7	2-Chloronaphthalene	40	
88-74-4	2-Nitroaniline	42	
131-11-3	Dimethylphthalate	52	
208-96-8	Acenaphthylene	39	
606-20-2	2,6-Dinitrotoluene	41	
99-09-2	3-Nitroaniline	24	
83-32-9	Acenaphthene	40	
51-28-5	2,4-Dinitrophenol	42	
100-02-7	4-Nitrophenol	13	J
132-64-9	Dibenzofuran	40	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5MS

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02BMS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2149.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	40	
84-66-2	Diethylphthalate	42	
7005-72-3	4-Chlorophenyl-phenylether	41	
86-73-7	Fluorene	40	
100-01-6	4-Nitroaniline	21	
534-52-1	4,6-Dinitro-2-methylphenol	37	
86-30-6	N-Nitrosodiphenylamine	39	
101-55-3	4-Bromophenyl-phenylether	40	
118-74-1	Hexachlorobenzene	40	
87-86-5	Pentachlorophenol	38	
85-01-8	Phenanthrene	38	
120-12-7	Anthracene	38	
86-74-8	Carbazole	37	
84-74-2	Di-n-butylphthalate	42	
206-44-0	Fluoranthene	37	
129-00-0	Pyrene	42	
85-68-7	Butylbenzylphthalate	42	
91-94-1	3,3´-Dichlorobenzidine	2.2	J
56-55-3	Benzo(a)anthracene	39	
218-01-9	Chrysene	39	
117-81-7	Bis(2-ethylhexyl)phthalate	41	
117-84-0	Di-n-octylphthalate	45	
205-99-2	Benzo(b)fluoranthene	47	
207-08-9	Benzo(k)fluoranthene	43	
50-32-8	Benzo(a)pyrene	42	
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	42	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02BMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2150.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	15	
111-44-4	Bis(2-chloroethyl)ether	37	
95-57-8	2-Chlorophenol	29	
541-73-1	1,3-Dichlorobenzene	33	
106-46-7	1,4-Dichlorobenzene	34	
95-50-1	1,2-Dichlorobenzene	34	
95-48-7	2-Methylphenol	25	
108-60-1	2,2´-oxybis(1-Chloropropane)	32	
106-44-5	4-Methylphenol	23	
621-64-7	N-Nitroso-di-n-propylamine	36	
67-72-1	Hexachloroethane	35	
98-95-3	Nitrobenzene	41	
78-59-1	Isophorone	39	
88-75-5	2-Nitrophenol	40	
105-67-9	2,4-Dimethylphenol	38	
120-83-2	2,4-Dichlorophenol	37	
120-82-1	1,2,4-Trichlorobenzene	37	
91-20-3	Naphthalene	46	
106-47-8	4-Chloroaniline	23	
111-91-1	Bis(2-chloroethoxy)methane	40	
87-68-3	Hexachlorobutadiene	40	
59-50-7	4-Chloro-3-methylphenol	35	
91-57-6	2-Methylnaphthalene	40	
77-47-4	Hexachlorocyclopentadiene	40	
88-06-2	2,4,6-Trichlorophenol	43	
95-95-4	2,4,5-Trichlorophenol	41	
91-58-7	2-Chloronaphthalene	40	
88-74-4	2-Nitroaniline	41	
131-11-3	Dimethylphthalate	53	
208-96-8	Acenaphthylene	37	
606-20-2	2,6-Dinitrotoluene	41	
99-09-2	3-Nitroaniline	24	
83-32-9	Acenaphthene	40	
51-28-5	2,4-Dinitrophenol	43	
100-02-7	4-Nitrophenol	16	J
132-64-9	Dibenzofuran	40	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L2626-02BMSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6B2150.D

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

% Moisture: Decanted: (Y/N) Date Received: 12/21/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 12/23/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 12/24/2012

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	41	
84-66-2	Diethylphthalate	42	
7005-72-3	4-Chlorophenyl-phenylether	41	
86-73-7	Fluorene	40	
100-01-6	4-Nitroaniline	20	J
534-52-1	4,6-Dinitro-2-methylphenol	37	
86-30-6	N-Nitrosodiphenylamine	38	
101-55-3	4-Bromophenyl-phenylether	41	
118-74-1	Hexachlorobenzene	41	
87-86-5	Pentachlorophenol	40	
85-01-8	Phenanthrene	39	
120-12-7	Anthracene	38	
86-74-8	Carbazole	38	
84-74-2	Di-n-butylphthalate	42	
206-44-0	Fluoranthene	37	
129-00-0	Pyrene	44	
85-68-7	Butylbenzylphthalate	44	
91-94-1	3,3´-Dichlorobenzidine	2.2	J
56-55-3	Benzo(a)anthracene	41	
218-01-9	Chrysene	42	
117-81-7	Bis(2-ethylhexyl)phthalate	43	
117-84-0	Di-n-octylphthalate	46	
205-99-2	Benzo(b)fluoranthene	45	
207-08-9	Benzo(k)fluoranthene	46	
50-32-8	Benzo(a)pyrene	43	
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	42	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

	CLIENT SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-69884	101	88	105	89	84	99			0
02	LCS-69884	94	87	100	83	81	97			0
03	MW-4	86	79	53	19	32	89			0
04	MW-5	68	69	56	17	25	81			0
05	MW-5MS	74	78	55	15	26	82			0
06	MW-5MSD	71	73	62	17	27	83			0
07	DUP-1	64	67	58	17	22	84			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

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Phenol	50.0000	5.1610	13.8209	17		0-115
Bis(2-chloroethyl)ether	50.0000	0.0000	35.0477	70		35-110
2-Chlorophenol	50.0000	0.0000	28.1253	56		35-105
1,3-Dichlorobenzene	50.0000	0.0000	33.3876	67		30-100
1,4-Dichlorobenzene	50.0000	0.0000	33.3628	67		30-100
1,2-Dichlorobenzene	50.0000	0.0000	34.2441	68		35-100
2-Methylphenol	50.0000	0.0000	23.6353	47		40-110
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	30.1988	60		30-123
4-Methylphenol	50.0000	2.4625	21.2506	38		30-110
N-Nitroso-di-n-propylamine	50.0000	0.0000	34.5781	69		35-130
Hexachloroethane	50.0000	0.0000	35.2227	70		30-95
Nitrobenzene	50.0000	0.0000	42.2823	85		45-110
Isophorone	50.0000	0.0000	38.4846	77		50-110
2-Nitrophenol	50.0000	0.0000	37.6765	75		40-115
2,4-Dimethylphenol	50.0000	0.0000	38.6833	77		30-110
2,4-Dichlorophenol	50.0000	0.0000	36.5671	73		50-105
1,2,4-Trichlorobenzene	50.0000	0.0000	38.7454	77		35-105
Naphthalene	50.0000	10.2255	53.1314	86		40-100
4-Chloroaniline	50.0000	0.0000	20.9668	42		15-110
Bis(2-chloroethoxy)methane	50.0000	0.0000	40.3088	81		45-105
Hexachlorobutadiene	50.0000	0.0000	40.2170	80		25-105
4-Chloro-3-methylphenol	50.0000	0.0000	34.2344	68		45-110
2-Methylnaphthalene	50.0000	0.0000	41.2081	82		45-105
Hexachlorocyclopentadiene	50.0000	0.0000	46.4672	93		27-147
2,4,6-Trichlorophenol	50.0000	0.0000	42.8330	86		50-115
2,4,5-Trichlorophenol	50.0000	0.0000	40.2631	81		50-110
2-Chloronaphthalene	50.0000	0.0000	39.7608	80		50-105
2-Nitroaniline	50.0000	0.0000	42.4458	85		50-115
Dimethylphthalate	50.0000	10.3203	51.7973	83		25-125
Acenaphthylene	50.0000	0.0000	38.6300	77		50-105
2,6-Dinitrotoluene	50.0000	0.0000	41.1812	82		50-115
3-Nitroaniline	50.0000	0.0000	23.9307	48		20-125
Acenaphthene	50.0000	0.0000	40.3367	81		45-110
2,4-Dinitrophenol	50.0000	0.0000	42.0518	84		15-140
4-Nitrophenol	50.0000	0.0000	12.8384	26		0-125
Dibenzofuran	50.0000	0.0000	40.0629	80		55-105
2,4-Dinitrotoluene	50.0000	0.0000	39.5025	79		50-120
Diethylphthalate	50.0000	1.3600	42.4285	82		40-120
4-Chlorophenyl-phenylether	50.0000	0.0000	40.9670	82		50-110
Fluorene	50.0000	0.0000	40.2639	81		50-110
4-Nitroaniline	50.0000	0.0000	21.0137	42		35-120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	36.8086	74		40-130
N-Nitrosodiphenylamine	50.0000	0.0000	38.6443	77		50-110
4-Bromophenyl-phenylether	50.0000	0.0000	39.9477	80		50-115

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

Hexachlorobenzene	50.0000	0.0000	39.9322	80		50-110
Pentachlorophenol	50.0000	0.0000	37.8204	76		40-115
Phenanthrene	50.0000	0.0000	37.7606	76		50-115
Anthracene	50.0000	0.0000	37.9599	76		55-110
Carbazole	50.0000	0.0000	36.8942	74		50-115
Di-n-butylphthalate	50.0000	3.9935	41.7608	76		55-115
Fluoranthene	50.0000	0.0000	36.5875	73		55-115
Pyrene	50.0000	0.0000	42.0277	84		50-130
Butylbenzylphthalate	50.0000	0.0000	42.0329	84		45-115
3,3´-Dichlorobenzidine	50.0000	0.0000	2.2396	4	*	20-110
Benzo(a)anthracene	50.0000	0.0000	39.1757	78		55-110
Chrysene	50.0000	0.0000	39.0348	78		55-110
Bis(2-ethylhexyl)phthalate	50.0000	1.9453	40.8146	78		40-125
Di-n-octylphthalate	50.0000	0.0000	44.6522	89		35-135
Benzo(b)fluoranthene	50.0000	0.0000	46.8444	94		45-120
Benzo(k)fluoranthene	50.0000	0.0000	42.6568	85		45-125
Benzo(a)pyrene	50.0000	0.0000	41.9660	84		55-110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	42.3066	85		45-125
Dibenzo(a,h)anthracene	50.0000	0.0000	42.5153	85		40-125
Benzo(g,h,i)perylene	50.0000	0.0000	41.7379	83		40-125

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	15.2875	20		16		0-40	0-115
Bis(2-chloroethyl)ether	50.0000	36.8128	74		5		0-40	35-110
2-Chlorophenol	50.0000	29.3625	59		4		0-40	35-105
1,3-Dichlorobenzene	50.0000	32.8560	66		2		0-40	30-100
1,4-Dichlorobenzene	50.0000	33.6915	67		1		0-40	30-100
1,2-Dichlorobenzene	50.0000	34.0099	68		1		0-40	35-100
2-Methylphenol	50.0000	24.9963	50		6		0-40	40-110
2,2´-oxybis(1-Chloropropan	50.0000	32.0883	64		6		0-40	30-123
4-Methylphenol	50.0000	23.3366	42		11		0-40	30-110
N-Nitroso-di-n-propylamine	50.0000	35.6498	71		3		0-40	35-130
Hexachloroethane	50.0000	35.0221	70		1		0-40	30-95
Nitrobenzene	50.0000	41.1769	82		3		0-40	45-110
Isophorone	50.0000	38.9009	78		1		0-40	50-110
2-Nitrophenol	50.0000	40.0213	80		6		0-40	40-115
2,4-Dimethylphenol	50.0000	37.9495	76		2		0-40	30-110
2,4-Dichlorophenol	50.0000	37.3165	75		2		0-40	50-105
1,2,4-Trichlorobenzene	50.0000	37.3115	75		4		0-40	35-105
Naphthalene	50.0000	45.7775	71		19		0-40	40-100
4-Chloroaniline	50.0000	23.0152	46		9		0-40	15-110
Bis(2-chloroethoxy)methane	50.0000	40.1561	80		0		0-40	45-105
Hexachlorobutadiene	50.0000	39.5620	79		2		0-40	25-105
4-Chloro-3-methylphenol	50.0000	35.1962	70		3		0-40	45-110
2-Methylnaphthalene	50.0000	39.9333	80		3		0-40	45-105

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

Hexachlorocyclopentadiene	50.0000	40.1279	80		15		0-40	27-147
2,4,6-Trichlorophenol	50.0000	43.4808	87		2		0-40	50-115
2,4,5-Trichlorophenol	50.0000	41.3374	83		3		0-40	50-110
2-Chloronaphthalene	50.0000	39.9612	80		1		0-40	50-105
2-Nitroaniline	50.0000	40.7420	81		4		0-40	50-115
Dimethylphthalate	50.0000	52.9270	85		3		0-40	25-125
Acenaphthylene	50.0000	37.4468	75		3		0-40	50-105
2,6-Dinitrotoluene	50.0000	41.1662	82		0		0-40	50-115
3-Nitroaniline	50.0000	24.3475	49		2		0-40	20-125
Acenaphthene	50.0000	40.1479	80		0		0-40	45-110
2,4-Dinitrophenol	50.0000	42.5672	85		1		0-40	15-140
4-Nitrophenol	50.0000	16.4552	33		25		0-40	0-125
Dibenzofuran	50.0000	40.1571	80		0		0-40	55-105
2,4-Dinitrotoluene	50.0000	40.5648	81		3		0-40	50-120
Diethylphthalate	50.0000	42.2691	82		0		0-40	40-120
4-Chlorophenyl-phenylether	50.0000	40.9546	82		0		0-40	50-110
Fluorene	50.0000	40.1496	80		0		0-40	50-110
4-Nitroaniline	50.0000	19.9742	40		5		0-40	35-120
4,6-Dinitro-2-methylphenol	50.0000	37.3568	75		1		0-40	40-130
N-Nitrosodiphenylamine	50.0000	38.2131	76		1		0-40	50-110
4-Bromophenyl-phenylether	50.0000	41.2199	82		3		0-40	50-115
Hexachlorobenzene	50.0000	41.3874	83		4		0-40	50-110
Pentachlorophenol	50.0000	40.4465	81		7		0-40	40-115
Phenanthrene	50.0000	38.9732	78		3		0-40	50-115
Anthracene	50.0000	37.8374	76		0		0-40	55-110
Carbazole	50.0000	37.7548	76		2		0-40	50-115
Di-n-butylphthalate	50.0000	42.1924	76		1		0-40	55-115
Fluoranthene	50.0000	37.4743	75		2		0-40	55-115
Pyrene	50.0000	43.9103	88		4		0-40	50-130
Butylbenzylphthalate	50.0000	44.1119	88		5		0-40	45-115
3,3´-Dichlorobenzidine	50.0000	2.1635	4	*	3		0-40	20-110
Benzo(a)anthracene	50.0000	41.2131	82		5		0-40	55-110
Chrysene	50.0000	41.8655	84		7		0-40	55-110
Bis(2-ethylhexyl)phthalate	50.0000	43.0981	82		6		0-40	40-125
Di-n-octylphthalate	50.0000	45.7956	92		3		0-40	35-135
Benzo(b)fluoranthene	50.0000	44.5333	89		5		0-40	45-120
Benzo(k)fluoranthene	50.0000	46.2781	93		8		0-40	45-125
Benzo(a)pyrene	50.0000	42.9113	86		2		0-40	55-110
Indeno(1,2,3-cd)pyrene	50.0000	43.1101	86		2		0-40	45-125
Dibenzo(a,h)anthracene	50.0000	43.7296	87		3		0-40	40-125
Benzo(g,h,i)perylene	50.0000	42.4303	85		2		0-40	40-125

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

* Values outside of QC limits

RPD: 0 out of 64 outside limits

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

Spike Recovery: 2 out of 128 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCS-69884 LCS Lot No.: A087697

Date Extracted: 12/23/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	42.5178	85		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	42.0982	84		35 - 110
2-Chlorophenol	50.0000	0.0000	42.2882	85		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	43.3445	87		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	42.7491	85		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	43.0440	86		35 - 100
2-Methylphenol	50.0000	0.0000	42.1585	84		40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	40.1335	80		30 - 123
4-Methylphenol	50.0000	0.0000	41.5398	83		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	41.6621	83		35 - 130
Hexachloroethane	50.0000	0.0000	44.9734	90		30 - 95
Nitrobenzene	50.0000	0.0000	49.7800	100		45 - 110
Isophorone	50.0000	0.0000	46.4122	93		50 - 110
2-Nitrophenol	50.0000	0.0000	49.9161	100		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	51.3306	103		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	47.5615	95		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	48.4302	97		35 - 105
Naphthalene	50.0000	0.0000	46.4896	93		40 - 100
4-Chloroaniline	50.0000	0.0000	46.7344	93		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	47.1254	94		45 - 105
Hexachlorobutadiene	50.0000	0.0000	54.3739	109	*	25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	48.5995	97		45 - 110
2-Methylnaphthalene	50.0000	0.0000	47.8715	96		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	57.2759	115		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	48.8796	98		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	46.1445	92		50 - 110
2-Chloronaphthalene	50.0000	0.0000	44.1182	88		50 - 105
2-Nitroaniline	50.0000	0.0000	48.1876	96		50 - 115
Dimethylphthalate	50.0000	0.0000	45.4239	91		25 - 125
Acenaphthylene	50.0000	0.0000	42.0921	84		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	45.9318	92		50 - 115
3-Nitroaniline	50.0000	0.0000	44.3688	89		20 - 125
Acenaphthene	50.0000	0.0000	44.2345	88		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	46.9733	94		15 - 140
4-Nitrophenol	50.0000	0.0000	50.1719	100		0 - 125
Dibenzofuran	50.0000	0.0000	45.3719	91		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	47.9760	96		50 - 120
Diethylphthalate	50.0000	0.0000	46.6562	93		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	47.4522	95		50 - 110
Fluorene	50.0000	0.0000	45.5418	91		50 - 110
4-Nitroaniline	50.0000	0.0000	39.4330	79		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	42.5188	85		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	41.2587	83		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	45.8962	92		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab Sample ID: LCS-69884 LCS Lot No.: A087697

Date Extracted: 12/23/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	47.4031	95		50 - 110
Pentachlorophenol	50.0000	0.0000	37.1144	74		40 - 115
Phenanthrene	50.0000	0.0000	42.2089	84		50 - 115
Anthracene	50.0000	0.0000	42.4953	85		55 - 110
Carbazole	50.0000	0.0000	40.2672	81		50 - 115
Di-n-butylphthalate	50.0000	0.0000	42.8442	86		55 - 115
Fluoranthene	50.0000	0.0000	44.2488	88		55 - 115
Pyrene	50.0000	0.0000	44.8640	90		50 - 130
Butylbenzylphthalate	50.0000	0.0000	46.0215	92		45 - 115
3,3´-Dichlorobenzidine	50.0000	0.0000	35.3147	71		20 - 110
Benzo(a)anthracene	50.0000	0.0000	46.6139	93		55 - 110
Chrysene	50.0000	0.0000	46.1025	92		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	45.2491	90		40 - 125
Di-n-octylphthalate	50.0000	0.0000	47.5190	95		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	52.5667	105		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	46.9956	94		45 - 125
Benzo(a)pyrene	50.0000	0.0000	49.5452	99		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	52.0002	104		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	52.3527	105		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	51.5787	103		40 - 125

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

* Values outside of QC limits

Spike Recovery: 1 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Lab File ID: S6B2142.D Lab Sample ID: MB-69884

Instrument ID: S6 Date Extracted: 12/23/2012

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 12/24/2012

Level: (LOW/MED) LOW Time Analyzed: 12:35

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-69884	LCS-69884	S6B2143.D	12/24/2012
02	MW-4	L2626-01B	S6B2147.D	12/24/2012
03	MW-5	L2626-02B	S6B2148.D	12/24/2012
04	MW-5MS	L2626-02BMS	S6B2149.D	12/24/2012
05	MW-5MSD	L2626-02BMSD	S6B2150.D	12/24/2012
06	DUP-1	L2626-03B	S6B2151.D	12/24/2012

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.: L2626 Mod. Ref No.: SDG No.: SL2626

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 12/18/2012 12/18/2012

EPA Sample No.(SSTD020##) SSTD0256H Date Analyzed: 12/24/2012

Lab File ID (Standard): S6B2141.D Time Analyzed: 11:59

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	96011		4.407		371117		5.523		277144		7.01	
	UPPER LIMIT	192022		4.907		742234		6.023		554288		7.51	
	LOWER LIMIT	48006		3.907		185559		5.023		138572		6.51	
	SAMPLE NO.												
01	MB-69884	81578		4.401		308946		5.523		219027		7.004	
02	LCS-69884	97119		4.407		362819		5.529		258755		7.010	
03	MW-4	112220		4.407		403984		5.523		288463		7.004	
04	MW-5	103774		4.407		383865		5.523		263809		7.004	
05	MW-5MS	124584		4.413		456544		5.529		298797		7.010	
06	MW-5MSD	118291		4.413		448837		5.529		297390		7.010	
07	DUP-1	107094		4.407		400235		5.523		272847		7.004	

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.: L2626 Mod. Ref No.: SDG No.: SL2626

EPA Sample No.(SSTD020##) SSTD0256H Date Analyzed: 12/24/2012

Lab File ID (Standard): S6B2141.D Time Analyzed: 11:59

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	570383		8.238		719439		10.488		702679		11.922	
	UPPER LIMIT	1140766		8.738		1438878		10.988		1405358		12.422	
	LOWER LIMIT	285192		7.738		359720		9.988		351340		11.422	
	SAMPLE NO.												
01	MB-69884	495849		8.238		589245		10.541		539562		11.998	
02	LCS-69884	569432		8.238		658185		10.494		589091		11.928	
03	MW-4	627524		8.237		680519		10.476		591502		11.904	
04	MW-5	575866		8.238		617761		10.470		537144		11.898	
05	MW-5MS	616935		8.238		631804		10.482		503075		11.910	
06	MW-5MSD	606811		8.238		612170		10.482		502423		11.910	
07	DUP-1	586439		8.238		617153		10.482		528531		11.910	

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.

* Metals *

REPORT NARRATIVE

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

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L2625

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 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: 01/04/13

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

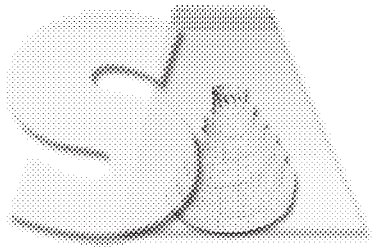
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-1

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Matrix (soil/water): WATER Lab Sample ID: L2625-01

Level (low/med): MED Date Received: 12/21/2012

% 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	882			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1050			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	53600			P
7440-47-3	Chromium	1.5	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	5.3	B		P
7439-89-6	Iron	12000			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	14400			P
7439-96-5	Manganese	1810			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium	5380			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	7030			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.4	B		P
7440-66-6	Zinc	11.6	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-2

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Matrix (soil/water): WATER Lab Sample ID: L2625-02

Level (low/med): MED Date Received: 12/21/2012

% 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	388			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	7130			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	111000			P
7440-47-3	Chromium	2.1	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	6.8	B		P
7439-89-6	Iron	2250			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	32900			P
7439-96-5	Manganese	841			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	5.0	B		P
7440-09-7	Potassium	13100			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	124000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	12.1	B		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-3

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Matrix (soil/water): WATER Lab Sample ID: L2625-03

Level (low/med): MED Date Received: 12/21/2012

% 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	1890			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	322			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	102000			P
7440-47-3	Chromium	3.2	B		P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	7.7	B		P
7439-89-6	Iron	3510			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	29500			P
7439-96-5	Manganese	747			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.6	B		P
7440-09-7	Potassium	5760			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	86000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	3.6	B		P
7440-66-6	Zinc	10.8	B		P

Comments:

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-69903**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8944.82	98.3						
Antimony	455.0	468.12	102.9						
Arsenic	455.0	463.37	101.8						
Barium	9100.0	9294.69	102.1						
Beryllium	227.0	227.32	100.1						
Cadmium	227.0	230.89	101.7						
Calcium	22700.0	21644.96	95.4						
Chromium	910.0	886.86	97.5						
Cobalt	2270.0	2245.48	98.9						
Copper	1130.0	1114.72	98.6						
Iron	4550.0	4394.32	96.6						
Lead	455.0	455.07	100.0						
Magnesium	22700.0	22827.00	100.6						
Manganese	2270.0	2281.86	100.5						
Nickel	2270.0	2252.30	99.2						
Potassium	22700.0	23318.35	102.7						
Selenium	455.0	465.50	102.3						
Silver	1130.0	1100.93	97.4						
Sodium	22700.0	23506.58	103.6						
Thallium	455.0	429.65	94.4						
Vanadium	2270.0	2185.45	96.3						
Zinc	2270.0	2248.52	99.1						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-69905**

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: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-69905**

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

FIMS2_121226A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	12/26/12 10:53	C		C		C		C	M
Mercury	0.028	U	0.028	U					0.028	U	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2625

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-69903**

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

OPTIMA3_121226A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 12/26/12 8:48	C	12/26/12 9:22	C	12/26/12 9:56	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	B	1.1	U	1.1	U	1.142	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	110.0	U	110.0	U	110.0	U	110.0	U	110.000	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Potassium	225.0	B	209.8	B	418.9	B	316.3	B	156.492	B	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
Sodium	127.8	B	142.8	B	204.1	B	826.5	B	53.124	B	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	5.542	B	P

* Metals *

REPORT NARRATIVE

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

Client : Sterling Environmental Engineering P.C.

Project: Town of Colonie

Laboratory Workorder / SDG #: L2626

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 codes: SW846 6010C, SW846 7470A.

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test codes: 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: MW-5 (L2626-02CMS).

Percent recoveries were within the QC limits with the following exceptions:

MW-5 (L2626-02CMS), Spike sample recovery is below criteria for Antimony at 74% with criteria of (75-125). Native concentration of Iron is over 4 times that of the spike concentration so no further action is required for the low recovery.

D. Post Digestion Spike (PDS):

Post-digestion spike analysis was performed on sample: MW-5 (L2626-02CPDS).

MW-5 (L2626-02CPDS) for Antimony due to recoveries of this element outside of QC limits in the matrix spike.

E. Duplicate sample:

Duplicate analyses were performed on sample: MW-5 (L2626-02CDUP).

Relative percent differences were within the QC limits.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on sample: MW-5 (L2626-02CSD).

Percent differences were within the QC limits.

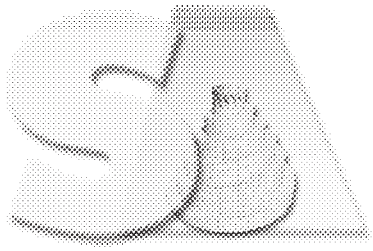
G. Samples:

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: 01/07/13



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

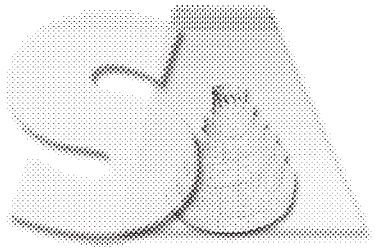
E — This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

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.



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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

DUP-1

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Matrix (soil/water): WATER Lab Sample ID: L2626-03

Level (low/med): MED Date Received: 12/21/2012

% 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	3230			P
7440-36-0	Antimony	14.8	B	N	P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	971			P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	1.3	B		P
7440-70-2	Calcium	122000			P
7440-47-3	Chromium	6.5	B		P
7440-48-4	Cobalt	6.5	B		P
7440-50-8	Copper	29.2	B		P
7439-89-6	Iron	6420			P
7439-92-1	Lead	9.7	B		P
7439-95-4	Magnesium	52100			P
7439-96-5	Manganese	3560			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	15.4	B		P
7440-09-7	Potassium	31600			P
7782-49-2	Selenium	15.2	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	66200			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	6.4	B		P
7440-66-6	Zinc	33.8	B		P

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-4

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Matrix (soil/water): WATER Lab Sample ID: L2626-01

Level (low/med): MED Date Received: 12/21/2012

% 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	82500			P
7440-36-0	Antimony	9.3	U	N	P
7440-38-2	Arsenic	42.7			P
7440-39-3	Barium	6690			P
7440-41-7	Beryllium	4.0	B		P
7440-43-9	Cadmium	1.7	B		P
7440-70-2	Calcium	142000			P
7440-47-3	Chromium	116			P
7440-48-4	Cobalt	74.6			P
7440-50-8	Copper	201			P
7439-89-6	Iron	167000			P
7439-92-1	Lead	121			P
7439-95-4	Magnesium	78700			P
7439-96-5	Manganese	5090			P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	169			P
7440-09-7	Potassium	21400			P
7782-49-2	Selenium	13.4	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	153000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	135			P
7440-66-6	Zinc	363			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-5

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Matrix (soil/water): WATER Lab Sample ID: L2626-02

Level (low/med): MED Date Received: 12/21/2012

% 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	9890			P
7440-36-0	Antimony	11.0	B	N	P
7440-38-2	Arsenic	9.1	B		P
7440-39-3	Barium	1680			P
7440-41-7	Beryllium	0.50	B		P
7440-43-9	Cadmium	1.7	B		P
7440-70-2	Calcium	131000			P
7440-47-3	Chromium	18.6	B		P
7440-48-4	Cobalt	12.7	B		P
7440-50-8	Copper	67.8			P
7439-89-6	Iron	19800			P
7439-92-1	Lead	31.8			P
7439-95-4	Magnesium	57200			P
7439-96-5	Manganese	3540			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	31.0	B		P
7440-09-7	Potassium	32600			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	68300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	18.2	B		P
7440-66-6	Zinc	84.5			P

Comments:

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-69903**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8944.82	98.3						
Antimony	455.0	468.12	102.9						
Arsenic	455.0	463.37	101.8						
Barium	9100.0	9294.69	102.1						
Beryllium	227.0	227.32	100.1						
Cadmium	227.0	230.89	101.7						
Calcium	22700.0	21644.96	95.4						
Chromium	910.0	886.86	97.5						
Cobalt	2270.0	2245.48	98.9						
Copper	1130.0	1114.72	98.6						
Iron	4550.0	4394.32	96.6						
Lead	455.0	455.07	100.0						
Magnesium	22700.0	22827.00	100.6						
Manganese	2270.0	2281.86	100.5						
Nickel	2270.0	2252.30	99.2						
Potassium	22700.0	23318.35	102.7						
Selenium	455.0	465.50	102.3						
Silver	1130.0	1100.93	97.4						
Sodium	22700.0	23506.58	103.6						
Thallium	455.0	429.65	94.4						
Vanadium	2270.0	2185.45	96.3						
Zinc	2270.0	2248.52	99.1						

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-69905**

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

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-5S

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

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
Aluminum	75-125	18300		9890		9100	92		P
Antimony	75-125	349		11.0	B	456	74	N	P
Arsenic	75-125	473		9.1	B	456	102		P
Barium	75-125	10500		1680		9100	97		P
Beryllium	75-125	226		0.50	B	227	100		P
Cadmium	75-125	220		1.7	B	227	96		P
Chromium	75-125	871		18.6	B	910	94		P
Cobalt	75-125	2160		12.7	B	2270	95		P
Copper	75-125	1170		67.8		1130	98		P
Iron		22200		19800		4550	53		P
Lead	75-125	468		31.8		455	96		P
Manganese	75-125	5410		3540		2270	82		P
Nickel	75-125	2170		31.0	B	2270	94		P
Selenium	75-125	464		12.0	U	455	102		P
Silver	75-125	1100		6.9	U	1130	97		P
Thallium	75-125	400		6.2	U	455	88		P
Vanadium	75-125	2180		18.2	B	2270	95		P
Zinc	75-125	2230		84.5		2270	95		P
Mercury	75-125	4.1		0.028	U	4.6	91		CV

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-5A

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

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

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

Analyte	Control Limit %R	Spike Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony		482.97		11.00	B	455.0	104		P
Iron		23242.85		19767.10		4550.0	76		P

Comments:

6

DUPLICATES

EPA SAMPLE NO.

MW-5D

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

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

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		9890.5061		9400.2741		5.1		P
Antimony		10.9956	B	9.3000	U	200		P
Arsenic		9.1410	B	4.5152	B	67.7		P
Barium		1678.5153		1584.0584		5.8		P
Beryllium		0.4952	B	0.5063	B	2.2		P
Cadmium		1.6732	B	1.6427	B	1.8		P
Calcium		130779.3491		122946.3030		6.2		P
Chromium		18.6022	B	17.6925	B	5		P
Cobalt		12.6969	B	12.2221	B	3.8		P
Copper	30.0	67.7772		64.1526		5.5		P
Iron		19767.0998		18649.2033		5.8		P
Lead	10.0	31.8118		28.3593		11.5		P
Magnesium		57172.4462		53825.8533		6		P
Manganese		3539.2974		3331.6486		6		P
Nickel		30.9544	B	29.9582	B	3.3		P
Potassium		32633.7872		31610.7657		3.2		P
Selenium		12.0000	U	12.2178	B	200		P
Silver		6.9000	U	6.9000	U			P
Sodium		68318.1982		65955.9582		3.5		P
Thallium		6.2000	U	6.2000	U			P
Vanadium		18.1842	B	17.0768	B	6.3		P
Zinc	50.0	84.5100		79.6909		5.9		P
Mercury		0.0280	U	0.0280	U			CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-69905**

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

FIMS2_121226A

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	12/26/12 10:53	C	12/26/12 11:11	C		C		C	M
Mercury	0.028	U	0.028	U	0.028	U			0.028	U	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-69903**

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

OPTIMA3_121226A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 12/26/12 8:48	C	12/26/12 9:22	C	12/26/12 9:56	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	B	1.1	U	1.1	U	1.142	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	110.0	U	110.0	U	110.0	U	110.0	U	110.000	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Potassium	225.0	B	209.8	B	418.9	B	316.3	B	156.492	B	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
Sodium	127.8	B	142.8	B	204.1	B	826.5	B	53.124	B	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	5.542	B	P

APPENDIX G

DATA USABILITY SUMMARY REPORTS (DUSRS)

(PROVIDED ON CD)

LETTER OF TRANSMITTAL

ALPHA GEOSCIENCE
679 Plank Road
Clifton Park, NY 12065
(518) 348 -6995 Phone
(518) 348-6966 FAX

TO: Mr. Nathan J. Shaffer
Sterling Environmental Engineering, PC
24 Wade Road
Latham, New York 12110

FROM: Don Anne'

DATE: 1/24/2013

SUBJECT: Data Validation
Town of Colonie
December 2012 Soil and Ground Water Sampling

WE ARE TRANSMITTING THE FOLLOWING ITEMS:

_____ Photographs
_____ Maps/Plans
_____ Report(s)
_____ Letter(s)
_____ Disk(s)
__X__ Other: Data Packs

Originals	Copies	Description of Materials
1		Spectrum Analytical, Inc. data pack, SDG: SL2554
1		Spectrum Analytical, Inc. data pack, SDG: SL2625/2626

These Materials are Transmitted:

_____ For your use
_____ For your approval
_____ For your review and comment
_____ Approved as submitted
_____ Approved as noted
__X__ Returned after loaned to us
_____ Returned for revision

Please: _____ Return original to us
_____ Submit after revision
_____ Retain for your files
_____ Other

REMARKS:

Returned upon completion of data validation.

ADDITIONAL COPIES TO:

SIGNATURE:

Donald Anne'

ALPHA
GEOSCIENCE
Geology
Hydrology
Remediation
Water Supply

January 24, 2013

Mr. Nathan J. Shaffer
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

Re: Data Validation Report
Town of Colonie
Troy Belting
December 2012 Soil and Ground Water Sampling Events

Dear Mr. Shaffer:

The data usability summary reports (DUSRs) and QA/QC reviews are attached to this letter for the above referenced project sampling events. The data for Spectrum Analytical, Inc., SDGs SL2554 and SL2625/SL2626 were acceptable with some minor issues that are identified and discussed in the validation summaries. There were no data that were flagged unusable (R) in the data packs.

A list of common data validation acronyms is attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Sterling Environmental Engineering, P.C.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachemnts

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

ALPHA GEOSCIENCE

Geology
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Data Usability Summary Report for
Spectrum Analytical, Inc., SDG: SL2554

1 Soil Sample and 1 Field Duplicate
Collected December 11, 2012

Prepared by: Donald Anné
January 24, 2013

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatiles, semi-volatiles and TAL metals for 1 soil sample and 1 field duplicate.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The volatile result for cis-1,2-dichloroethene in sample DUP1 was quantitated using data that was extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The result for cis-1,2-dichloroethene marked "E" in the undiluted sample DUP1 was qualified as estimated (J).

- Positive volatile results for the following compounds were flagged as "estimated" (J) in samples SO1-MW5 and DUP1/DUP1DL because relative percent differences for these compounds were above the allowable maximum in the soil field duplicate pair SO1-MW5/DUP1.

vinyl chloride	cis-1,2-dichloroethene	trichloroethene
tetrachloroethene	ethylbenzene	m,p-xylene
o-xylene	xylene (total)	

- The semi-volatile results for fluoranthene, pyrene, and benzo(b)fluoranthene in sample SO1-MW5 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for fluoranthene, pyrene, and benzo(b)fluoranthene marked "E" in the undiluted sample SO1-MW5 were qualified as estimated (J).

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- Positive semi-volatile results for the following compounds were flagged as "estimated" (J) in samples SO1-MW5/SO1-MW5DL and DUP1 because relative percent differences for these compounds were above the allowable maximum in the soil field duplicate pair SO1-MW5/DUP1.

pheneanthrene	fluoranthene	pyrene
benzo(a)anthracene	chrysene	bis(2-ethylhexyl)phthalate
benzo(b)fluoranthene	benzo(a)pyrene	benzo(k)fluoranthene
indeno(1,2,3-cd)pyrene	benzo(g,h,i)perylene	

- Positive metal results for antimony and chromium were flagged as "estimated" (J) in samples SO1-MW5 and DUP1 because the percent recoveries for antimony and chromium were below control limits, but were not below 10% in the associated soil spike sample.

- Positive metal results for beryllium, copper, and mercury were flagged as "estimated" (J) in samples SO1-MW5 and DUP1 because relative percent differences for beryllium, copper, and mercury were above the allowable maximum in soil field duplicate pair SO1-MW5/DUP1.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA GEOSCIENCE

Geology
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Water Supply

QA/QC Review of Method 8260C Volatiles Data for Spectrum Analytical, Inc., SDG: SL2554

1 Soil Sample and 1 Field Duplicate Collected December 11, 2012

Prepared by: Donald Anné
January 24, 2013

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260C.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260C.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum, but 11 of 136 percent recoveries were outside QC limits for soil MS/MSD sample SO1-MW5. This was due to high concentrations of target compounds in the unspiked sample. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for target compounds were within the QC limits for soil samples LCS-69772 and LCS-69791.

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Field Duplicate: The relative percent differences for the following compounds were above the allowable maximum (35%) for soil field duplicate pair SO1-MW5/DUP1 (attached table). Results for these compounds should be considered estimated (J) in samples SO1-MW5 and DUP1.

vinyl chloride	cis-1,2-dichloroethene	trichloroethene
tetrachloroethene	ethylbenzene	m,p-xylene
o-xylene	xylene (total)	

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There is a result for cis-1,2-dichloroethene in sample DUP1 that was quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the result for cis-1,2-dichloroethene that is flagged as 'E' in the undiluted sample should be considered estimated (J). The use of the diluted result for cis-1,2-dichloroethene is recommended. It is recommended that the undiluted results for the sample be used for all other compounds.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. SL2554

S1= SO1-MW5 **S2=** DUP1

Analyte	S1	S2	RPD (%)	
vinyl chloride	610	920	41%	*
trans-1,2-dichloroethene	**150**	**210**	NC	
cis-1,2-dichloroethene	7100	*12000*	51%	*
trichloroethene	1500	560	91%	*
toluene	**180**	310	NC	
tetrachloroethene	5100	2100	83%	*
ethylbenzene	360	560	43%	*
m,p-xylene	990	1500	41%	*
o-xylene	540	820	41%	*
xylene (total)	1500	2300	42%	*
isopropylbenzene	320	440	32%	
n-propylbenzene	750	1000	29%	
1,3,5-trimethylbenzene	2800	3500	22%	
1,2,4-trimethylbenzene	6800	8800	26%	
sec-butylbenzene	1200	1300	8%	
4-isopropyltoluene	1500	ND	NC	
n-butylbenzene	3200	3300	3%	
naphthalene	880	850	3%	

* RPD is above the allowable maximum (35%)

All results are in ug/kg

Italic numbers are diluted values
Bold numbers were values that below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	3129.7816	0.0000	3218.4946	103		35-135
Chloromethane	3129.7816	0.0000	2880.8898	92		50-130
Vinyl chloride	3129.7816	609.2091	3792.2507	102		60-125
Bromomethane	3129.7816	0.0000	296.3241	9	*	30-160
Chloroethane	3129.7816	0.0000	2120.1101	68		40-155
Trichlorofluoromethane	3129.7816	0.0000	3184.6056	102		25-185
1,1-Dichloroethene	3129.7816	0.0000	2778.2853	89		65-135
Acetone	3129.7816	0.0000	2648.5317	85		20-160
Iodomethane	3129.7816	0.0000	1442.3827	46	*	70-126
Carbon disulfide	3129.7816	0.0000	2722.5747	87		45-160
Methylene chloride	3129.7816	0.0000	2476.8409	79		55-140
trans-1,2-Dichloroethene	3129.7816	147.8825	2930.6069	89		65-135
Methyl tert-butyl ether	3129.7816	0.0000	2754.3060	88		75-126
1,1-Dichloroethane	3129.7816	0.0000	2753.6609	88		75-125
Vinyl acetate	3129.7816	0.0000	2339.4159	75		65-138
2-Butanone	3129.7816	0.0000	3771.6701	121		30-160
cis-1,2-Dichloroethene	3129.7816	7076.2427	10874.2287	121		65-125
2,2-Dichloropropane	3129.7816	0.0000	1995.6728	64	*	65-135
Bromochloromethane	3129.7816	0.0000	2775.9274	89		70-125
Chloroform	3129.7816	0.0000	2782.4449	89		70-125
1,1,1-Trichloroethane	3129.7816	0.0000	3056.7525	98		70-135
1,1-Dichloropropene	3129.7816	0.0000	2854.8884	91		70-135
Carbon tetrachloride	3129.7816	0.0000	3111.1268	99		65-135
1,2-Dichloroethane	3129.7816	0.0000	2916.5592	93		70-135
Benzene	3129.7816	0.0000	2761.3712	88		75-125
Trichloroethene	3129.7816	1469.8261	3505.7285	65	*	75-125
1,2-Dichloropropane	3129.7816	0.0000	2757.7102	88		70-120
Dibromomethane	3129.7816	0.0000	2872.5557	92		75-130
Bromodichloromethane	3129.7816	0.0000	2876.6328	92		70-130
cis-1,3-Dichloropropene	3129.7816	0.0000	2684.6874	86		70-125
4-Methyl-2-pentanone	3129.7816	0.0000	2816.8911	90		45-145
Toluene	3129.7816	179.0666	2977.1593	89		70-125
trans-1,3-Dichloropropene	3129.7816	0.0000	2815.6151	90		65-125
1,1,2-Trichloroethane	3129.7816	0.0000	3342.5252	107		60-125
1,3-Dichloropropane	3129.7816	0.0000	2650.1022	85		75-125
Tetrachloroethene	3129.7816	5146.2251	5233.2430	3	*	65-140
2-Hexanone	3129.7816	0.0000	2398.1235	77		45-145
Dibromochloromethane	3129.7816	0.0000	2779.6096	89		65-130
1,2-Dibromoethane	3129.7816	0.0000	2693.3386	86		70-125
Chlorobenzene	3129.7816	0.0000	2668.7904	85		75-125
1,1,1,2-Tetrachloroethane	3129.7816	0.0000	2813.5141	90		75-125
Ethylbenzene	3129.7816	358.1594	2986.5491	84		75-125
m,p-Xylene	6259.5633	988.0577	6176.5420	83		80-125
o-Xylene	3129.7816	543.3684	3192.5439	85		75-125

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

Xylene (Total)	9389.3449	1531.4261	9369.0859	83		75-125
Styrene	3129.7816	0.0000	2770.1639	89		75-125
Bromoform	3129.7816	0.0000	2869.9408	92		55-135
Isopropylbenzene	3129.7816	321.4627	3273.0226	94		75-130
1,1,2,2-Tetrachloroethane	3129.7816	0.0000	2527.9736	81		55-130
Bromobenzene	3129.7816	0.0000	2526.2764	81		65-120
1,2,3-Trichloropropane	3129.7816	0.0000	2424.7540	77		65-130
n-Propylbenzene	3129.7816	754.5949	3654.4334	93		65-135
2-Chlorotoluene	3129.7816	0.0000	2637.5263	84		70-130
1,3,5-Trimethylbenzene	3129.7816	2814.0982	5613.0471	89		65-135
4-Chlorotoluene	3129.7816	0.0000	2443.6004	78		75-125
tert-Butylbenzene	3129.7816	0.0000	2777.3409	89		65-130
1,2,4-Trimethylbenzene	3129.7816	6771.0625	10734.9753	127		65-135
sec-Butylbenzene	3129.7816	1201.3558	4234.7286	97		65-130
4-Isopropyltoluene	3129.7816	1526.1588	4936.1761	109		75-135
1,3-Dichlorobenzene	3129.7816	0.0000	2603.2796	83		70-125
1,4-Dichlorobenzene	3129.7816	0.0000	2570.4947	82		70-125
n-Butylbenzene	3129.7816	3198.9678	7273.9270	130		65-140
1,2-Dichlorobenzene	3129.7816	0.0000	2648.6673	85		75-120
1,2-Dibromo-3-chloropropan	3129.7816	0.0000	3189.7473	102		40-135
1,2,4-Trichlorobenzene	3129.7816	0.0000	2939.9202	94		65-130
Hexachlorobutadiene	3129.7816	0.0000	3927.4198	125		55-140
1,2,3-Trichlorobenzene	3129.7816	0.0000	2879.5611	92		60-135
Naphthalene	3129.7816	882.9159	3559.9123	86		40-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	3129.7816	2927.3107	94		9		0-40	35-135
Chloromethane	3129.7816	3431.6242	110		17		0-40	50-130
Vinyl chloride	3129.7816	4362.9926	120		16		0-40	60-125
Bromomethane	3129.7816	351.1140	11	*	17		0-40	30-160
Chloroethane	3129.7816	2312.7453	74		9		0-40	40-155
Trichlorofluoromethane	3129.7816	3156.1275	101		1		0-40	25-185
1,1-Dichloroethene	3129.7816	2942.6043	94		6		0-40	65-135
Acetone	3129.7816	3195.4031	102		19		0-40	20-160
Iodomethane	3129.7816	2052.3429	66	*	35		0-40	70-126
Carbon disulfide	3129.7816	3025.1281	97		11		0-40	45-160
Methylene chloride	3129.7816	2863.0775	91		14		0-40	55-140
trans-1,2-Dichloroethene	3129.7816	3296.0191	101		12		0-40	65-135
Methyl tert-butyl ether	3129.7816	3250.8146	104		17		0-40	75-126
1,1-Dichloroethane	3129.7816	3179.8067	102		14		0-40	75-125
Vinyl acetate	3129.7816	2724.4450	87		15		0-40	65-138
2-Butanone	3129.7816	4366.5558	140		15		0-40	30-160
cis-1,2-Dichloroethene	3129.7816	11571.3873	144	*	17		0-40	65-125
2,2-Dichloropropane	3129.7816	2263.6008	72		13		0-40	65-135
Bromochloromethane	3129.7816	3152.5247	101		13		0-40	70-125

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

Chloroform	3129.7816	3128.6772	100		12		0-40	70-125
1,1,1-Trichloroethane	3129.7816	3357.5170	107		9		0-40	70-135
1,1-Dichloropropene	3129.7816	3209.1300	103		12		0-40	70-135
Carbon tetrachloride	3129.7816	3257.5967	104		5		0-40	65-135
1,2-Dichloroethane	3129.7816	3305.8170	106		13		0-40	70-135
Benzene	3129.7816	3137.8855	100		13		0-40	75-125
Trichloroethene	3129.7816	3932.5175	79		19		0-40	75-125
1,2-Dichloropropane	3129.7816	3171.3978	101		14		0-40	70-120
Dibromomethane	3129.7816	3278.9899	105		13		0-40	75-130
Bromodichloromethane	3129.7816	3265.9974	104		13		0-40	70-130
cis-1,3-Dichloropropene	3129.7816	3065.1106	98		13		0-40	70-125
4-Methyl-2-pentanone	3129.7816	3459.8586	111		20		0-40	45-145
Toluene	3129.7816	3354.2793	101		13		0-40	70-125
trans-1,3-Dichloropropene	3129.7816	3240.0676	104		14		0-40	65-125
1,1,2-Trichloroethane	3129.7816	3717.1559	119		11		0-40	60-125
1,3-Dichloropropane	3129.7816	3092.1511	99		15	6%	0-40	75-125
Tetrachloroethene	3129.7816	5540.4013	13	*	~~126~~	*	0-40	65-140
2-Hexanone	3129.7816	2771.0020	89		14		0-40	45-145
Dibromochloromethane	3129.7816	3207.6861	102		14		0-40	65-130
1,2-Dibromoethane	3129.7816	3180.1185	102		17		0-40	70-125
Chlorobenzene	3129.7816	3099.0159	99		15		0-40	75-125
1,1,1,2-Tetrachloroethane	3129.7816	3247.8909	104		14		0-40	75-125
Ethylbenzene	3129.7816	3372.1844	96		14		0-40	75-125
m,p-Xylene	6259.5633	7032.4997	97		15		0-40	80-125
o-Xylene	3129.7816	3620.3736	98		15		0-40	75-125
Xylene (Total)	9389.3449	10652.8733	97		15		0-40	75-125
Styrene	3129.7816	3221.6004	103		15		0-40	75-125
Bromoform	3129.7816	3365.8413	108		16		0-40	55-135
Isopropylbenzene	3129.7816	3675.9331	107		13		0-40	75-130
1,1,2,2-Tetrachloroethane	3129.7816	3067.6246	98		19		0-40	55-130
Bromobenzene	3129.7816	2967.3115	95		16		0-40	65-120
1,2,3-Trichloropropane	3129.7816	2870.2988	92		17		0-40	65-130
n-Propylbenzene	3129.7816	4112.0604	107		15		0-40	65-135
2-Chlorotoluene	3129.7816	3045.6688	97		14		0-40	70-130
1,3,5-Trimethylbenzene	3129.7816	6013.2099	102		13		0-40	65-135
4-Chlorotoluene	3129.7816	2837.9894	91		15		0-40	75-125
tert-Butylbenzene	3129.7816	3163.8118	101		13		0-40	65-130
1,2,4-Trimethylbenzene	3129.7816	11263.5758	144	*	13		0-40	65-135
sec-Butylbenzene	3129.7816	4564.2696	107		10		0-40	65-130
4-Isopropyltoluene	3129.7816	5289.5486	120		10		0-40	75-135
1,3-Dichlorobenzene	3129.7816	2997.6432	96		14		0-40	70-125
1,4-Dichlorobenzene	3129.7816	2996.9403	96		15		0-40	70-125
n-Butylbenzene	3129.7816	7592.1313	140	*	8		0-40	65-140
1,2-Dichlorobenzene	3129.7816	3047.8995	97		14		0-40	75-120
1,2-Dibromo-3-chloropropan	3129.7816	3634.4468	116		13		0-40	40-135
1,2,4-Trichlorobenzene	3129.7816	3308.2907	106		12		0-40	65-130
Hexachlorobutadiene	3129.7816	4280.2682	137		9		0-40	55-140

3B - FORM III VOA-2

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5 Level: (LOW/MED) MED

1,2,3-Trichlorobenzene	3129.7816	3283.4068	105		13		0-40	60-135
Naphthalene	3129.7816	4017.2723	100		16		0-40	40-125

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

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 11 out of 136 outside limits

COMMENTS:

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of 8270D Semi-Volatiles Data
for Spectrum Analytical, Inc., SDG: SL2554

1 Soil Sample and 1 Field Duplicate
Collected December 11, 2012

Prepared by: Donald Anné
January 24, 2013

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270D.

The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for hexachlorocyclopentadiene was above the allowable maximum (30%) for S6 on 12-11-12. Positive results for hexachlorocyclopentadiene should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270D.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for nitrobenzene, hexachlorocyclopentadiene, and 4-nitrophenol were above the allowable maximum (25%) on 12-13-12 (S6B1891.D). The %Ds for nitrobenzene and 4-nitrophenol were above the allowable maximum (25%) on 12-14-12 (S6B1931.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: Thee surrogate recoveries were within control limits for soil samples.

679 Plank Road ▪ Clifton Park, New York 12065 ▪ (518) 348-6995 ▪ FAX (518) 348-6966
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Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum, but 15 of 128 percent recoveries were outside QC limits for soil MS/MSD sample SO1-MW5. This was due to high concentrations of target compounds in the unspiked sample. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for soil sample LCS-69705.

Field Duplicate: The relative percent differences for the following compounds were above the allowable maximum (35%) for soil field duplicate pair SO1-MW5/DUP1 (attached table). Results for these compounds should be considered estimated (J) in samples SO1-MW5 and DUP1.

pheneanthrene	fluoranthene	pyrene
benzo(a)anthracene	chrysene	bis(2-ethylhexyl)phthalate
benzo(b)fluoranthene	benzo(a)pyrene	benzo(k)fluoranthene
indeno(1,2,3-cd)pyrene	benzo(g,h,i)perylene	

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There are results for fluoranthene, pyrene, and benzo(b)fluoranthene in sample SO1-MW5 that were quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the results for the compounds that are flagged as 'E' in the undiluted sample should be considered estimated (J). The use of the diluted results for fluoranthene, pyrene, and benzo(b)fluoranthene is recommended. It is recommended that the undiluted results for the sample be used for all other compounds.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. SL2554

S1= SO1-MW5 **S2=** DUP1

Analyte	S1	S2	RPD (%)	
naphthalene	**110**	**190**	NC	
acenaphthene	**350**	ND	NC	
dibenzofuran	**150**	ND	NC	
fluorene	**370**	ND	NC	
phenanthrene	6900	2100	107%	*
anthracene	1000	**280**	NC	
carbazole	690	**240**	NC	
di-n-butylphthalate	**300**	**270**	NC	
fluoranthene	*13000*	4600	95%	*
pyrene	*10000*	3700	92%	*
butylbenzylphthalate	**270**	ND	NC	
benzo(a)anthracene	5500	1800	101%	*
chrysene	6400	2300	94%	*
bis(2-ethylhexyl)phthalate	1500	920	48%	*
benzo(b)fluoranthene	*8400*	2900	97%	*
benzo(k)fluoranthene	3700	1000	115%	*
benzo(a)pyrene	5600	1900	99%	*
indeno(1,2,3-cd)pyrene	3500	1200	98%	*
dibenzo(a,h)anthracene	980	**370**	NC	
benzo(g,h,i)perylene	4000	1400	96%	*

* RPD is above the allowable maximum (35%)

Results are in units of ug/kg.

Italic numbers are diluted values
Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS %REC	#	QC. LIMITS REC.
Phenol	4459.3800	0.0000	3270.6995	73		40-100
Bis(2-chloroethyl)ether	4459.3800	0.0000	2997.3924	67		40-105
2-Chlorophenol	4459.3800	0.0000	3320.3099	74		45-105
1,3-Dichlorobenzene	4459.3800	0.0000	3052.8210	68		40-100
1,4-Dichlorobenzene	4459.3800	0.0000	3151.0963	71		35-105
1,2-Dichlorobenzene	4459.3800	0.0000	3100.1260	70		45-95
2-Methylphenol	4459.3800	0.0000	3021.7925	68		40-105
2,2´-oxybis(1-Chloropropan	4459.3800	0.0000	2685.0689	60		20-115
4-Methylphenol	4459.3800	0.0000	3102.6368	70		40-105
N-Nitroso-di-n-propylamine	4459.3800	0.0000	3094.4647	69		40-115
Hexachloroethane	4459.3800	0.0000	2776.4637	62		35-110
Nitrobenzene	4459.3800	0.0000	3885.7874	87		40-115
Isophorone	4459.3800	0.0000	3522.5476	79		45-110
2-Nitrophenol	4459.3800	0.0000	3979.9872	89		40-110
2,4-Dimethylphenol	4459.3800	0.0000	4265.8173	96		30-105
2,4-Dichlorophenol	4459.3800	0.0000	3944.3089	88		45-110
1,2,4-Trichlorobenzene	4459.3800	0.0000	3841.1027	86		45-110
Naphthalene	4459.3800	113.6694	3680.1679	80		40-105
4-Chloroaniline	4459.3800	0.0000	1550.2104	35		10-100
Bis(2-chloroethoxy)methane	4459.3800	0.0000	3557.1729	80		45-110
Hexachlorobutadiene	4459.3800	0.0000	4052.3920	91		40-115
4-Chloro-3-methylphenol	4459.3800	0.0000	3919.9985	88		45-115
2-Methylnaphthalene	4459.3800	0.0000	3831.3317	86		45-105
Hexachlorocyclopentadiene	4459.3800	0.0000	2461.4950	55		8-148
2,4,6-Trichlorophenol	4459.3800	0.0000	3965.8383	89		45-110
2,4,5-Trichlorophenol	4459.3800	0.0000	3924.9478	88		50-110
2-Chloronaphthalene	4459.3800	0.0000	3596.3289	81		45-105
2-Nitroaniline	4459.3800	0.0000	3521.4337	79		45-120
Dimethylphthalate	4459.3800	0.0000	3496.4475	78		50-110
Acenaphthylene	4459.3800	0.0000	3418.8785	77		45-105
2,6-Dinitrotoluene	4459.3800	0.0000	3523.4379	79		50-110
3-Nitroaniline	4459.3800	0.0000	2127.5485	48		25-110
Acenaphthene	4459.3800	353.5416	3768.0085	77		45-110
2,4-Dinitrophenol	4459.3800	0.0000	2659.3456	60		15-130
4-Nitrophenol	4459.3800	0.0000	4295.3247	96		15-140
Dibenzofuran	4459.3800	148.2680	3666.7645	79		50-105
2,4-Dinitrotoluene	4459.3800	0.0000	3599.7111	81		50-115
Diethylphthalate	4459.3800	0.0000	3530.2462	79		50-115
4-Chlorophenyl-phenylether	4459.3800	0.0000	3625.3730	81		45-110
Fluorene	4459.3800	366.0659	3890.6731	79		50-110
4-Nitroaniline	4459.3800	0.0000	2428.2665	54		35-115
4,6-Dinitro-2-methylphenol	4459.3800	0.0000	2440.7352	55		30-135
N-Nitrosodiphenylamine	4459.3800	0.0000	3591.4408	81		50-115
4-Bromophenyl-phenylether	4459.3800	0.0000	3833.4532	86		45-115

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

Hexachlorobenzene	4459.3800	0.0000	3912.4666	88		45-120
Pentachlorophenol	4459.3800	0.0000	4654.2438	104		25-120
Phenanthrene	4459.3800	6914.9218	8342.6606	32	*	50-110
Anthracene	4459.3800	1044.8570	4415.3796	76		55-105
Carbazole	4459.3800	685.0531	3794.8430	70		45-115
Di-n-butylphthalate	4459.3800	303.7875	3783.5829	78		55-110
Fluoranthene	4459.3800	13987.6615	12466.1737	-34	*	55-115
Pyrene	4459.3800	10742.7164	10447.2570	-7	*	45-125
Butylbenzylphthalate	4459.3800	272.8485	3660.1549	76		50-125
3,3'-Dichlorobenzidine	4459.3800	0.0000	1422.7118	32		10-130
Benzo(a)anthracene	4459.3800	5503.6937	7391.6092	42	*	50-110
Chrysene	4459.3800	6398.4336	7513.6094	25	*	55-110
Bis(2-ethylhexyl)phthalate	4459.3800	1535.4724	5004.3772	78		45-125
Di-n-octylphthalate	4459.3800	0.0000	3827.4563	86		40-130
Benzo(b)fluoranthene	4459.3800	7869.6107	9166.6081	29	*	45-115
Benzo(k)fluoranthene	4459.3800	3725.1202	5981.5726	51		45-125
Benzo(a)pyrene	4459.3800	5555.7978	7424.5387	42	*	50-110
Indeno(1,2,3-cd)pyrene	4459.3800	3516.7739	6150.0437	59		40-120
Dibenzo(a,h)anthracene	4459.3800	979.2795	4378.8579	76		40-125
Benzo(g,h,i)perylene	4459.3800	3982.3827	6318.8235	52		40-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	4488.5262	3368.8515	75		2		0-40	40-100
Bis(2-chloroethyl)ether	4488.5262	3028.7704	67		0		0-40	40-105
2-Chlorophenol	4488.5262	3395.6407	76		2		0-40	45-105
1,3-Dichlorobenzene	4488.5262	3202.7050	71		4		0-40	40-100
1,4-Dichlorobenzene	4488.5262	3246.3594	72		2		0-40	35-105
1,2-Dichlorobenzene	4488.5262	3208.2975	71		3		0-40	45-95
2-Methylphenol	4488.5262	3097.3757	69		2		0-40	40-105
2,2'-oxybis(1-Chloropropan	4488.5262	2783.9753	62		3		0-40	20-115
4-Methylphenol	4488.5262	3272.7751	73		5		0-40	40-105
N-Nitroso-di-n-propylamine	4488.5262	3221.8048	72		3		0-40	40-115
Hexachloroethane	4488.5262	3093.6341	69		10		0-40	35-110
Nitrobenzene	4488.5262	3929.0610	88		0		0-40	40-115
Isophorone	4488.5262	3601.6765	80		2		0-40	45-110
2-Nitrophenol	4488.5262	3953.2435	88		1		0-40	40-110
2,4-Dimethylphenol	4488.5262	4384.9756	98		2		0-40	30-105
2,4-Dichlorophenol	4488.5262	4114.8525	92		4		0-40	45-110
1,2,4-Trichlorobenzene	4488.5262	3913.8623	87		1		0-40	45-110
Naphthalene	4488.5262	3965.5462	86		7		0-40	40-105
4-Chloroaniline	4488.5262	1205.3511	27		26		0-40	10-100
Bis(2-chloroethoxy)methane	4488.5262	3648.2148	81		2		0-40	45-110
Hexachlorobutadiene	4488.5262	4145.3850	92		2		0-40	40-115
4-Chloro-3-methylphenol	4488.5262	3984.0400	89		1		0-40	45-115
2-Methylnaphthalene	4488.5262	3947.0477	88		2		0-40	45-105

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

Hexachlorocyclopentadiene	4488.5262	1985.4905	44		22		0-40	8-148
2,4,6-Trichlorophenol	4488.5262	4172.7793	93		4		0-40	45-110
2,4,5-Trichlorophenol	4488.5262	4152.6147	93		5		0-40	50-110
2-Chloronaphthalene	4488.5262	3758.2591	84		4		0-40	45-105
2-Nitroaniline	4488.5262	3808.3763	85		7		0-40	45-120
Dimethylphthalate	4488.5262	3715.7236	83		5		0-40	50-110
Acenaphthylene	4488.5262	3528.6218	79		3		0-40	45-105
2,6-Dinitrotoluene	4488.5262	3649.0140	81		3		0-40	50-110
3-Nitroaniline	4488.5262	2055.5123	46		4		0-40	25-110
Acenaphthene	4488.5262	3728.0267	75		2		0-40	45-110
2,4-Dinitrophenol	4488.5262	1971.1321	44		30		0-40	15-130
4-Nitrophenol	4488.5262	4150.9117	92		4		0-40	15-140
Dibenzofuran	4488.5262	3724.3929	80		1		0-40	50-105
2,4-Dinitrotoluene	4488.5262	3702.2440	82		2		0-40	50-115
Diethylphthalate	4488.5262	3678.4500	82		3		0-40	50-115
4-Chlorophenyl-phenylether	4488.5262	3844.1082	86		5		0-40	45-110
Fluorene	4488.5262	3836.8442	77		2		0-40	50-110
4-Nitroaniline	4488.5262	2369.2834	53		3		0-40	35-115
4,6-Dinitro-2-methylphenol	4488.5262	1860.9257	41		28		0-40	30-135
N-Nitrosodiphenylamine	4488.5262	3705.5629	83		2		0-40	50-115
4-Bromophenyl-phenylether	4488.5262	3878.8465	86		1		0-40	45-115
Hexachlorobenzene	4488.5262	3983.8191	89		1		0-40	45-120
Pentachlorophenol	4488.5262	4709.9223	105		1		0-40	25-120
Phenanthrene	4488.5262	7210.0845	7	*	132 15	*	0-40	50-110
Anthracene	4488.5262	4148.4430	69		9		0-40	55-105
Carbazole	4488.5262	3954.0849	73		4		0-40	45-115
Di-n-butylphthalate	4488.5262	3910.5694	80		3		0-40	55-110
Fluoranthene	4488.5262	10472.3650	-78	*	-7 9	17	0-40	55-115
Pyrene	4488.5262	8970.8620	-39	*	-14 3	15	0-40	45-125
Butylbenzylphthalate	4488.5262	3953.6864	82		8		0-40	50-125
3,3'-Dichlorobenzidine	4488.5262	1399.6484	31		2		0-40	10-130
Benzo(a)anthracene	4488.5262	6179.9934	15	*	9 8	18 *	0-40	50-110
Chrysene	4488.5262	6928.1676	12	*	7 2	8	0-40	55-110
Bis(2-ethylhexyl)phthalate	4488.5262	4780.1950	72		7		0-40	45-125
Di-n-octylphthalate	4488.5262	4008.3320	89		4		0-40	40-130
Benzo(b)fluoranthene	4488.5262	8122.9937	6	*	135	12 *	0-40	45-115
Benzo(k)fluoranthene	4488.5262	5452.8004	38	*	27		0-40	45-125
Benzo(a)pyrene	4488.5262	6583.7273	23	*	5 9	12 *	0-40	50-110
Indeno(1,2,3-cd)pyrene	4488.5262	5733.3804	49		18		0-40	40-120
Dibenzo(a,h)anthracene	4488.5262	4395.4605	76		0		0-40	40-125
Benzo(g,h,i)perylene	4488.5262	5786.2732	40		26		0-40	40-125

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

* Values outside of QC limits

RPD = $\frac{|\text{Sample conc} - \text{dup conc}|}{(\text{Sample conc} + \text{dup conc})/2} \times 100\%$

RPD: 7 out of 64 outside limits

3D - FORM III SV-2

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: _____ SDG No.: SL2554

Matrix Spike - EPA Sample No.: SO1-MW5

Spike Recovery: 15 out of 128 outside limits

COMMENTS: _____

_____

6 - FORM VI SV-1

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: L2554 SAS No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date(s): 12/11/2012 12/11/2012

Calibration Times: 12:05 17:56

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

LAB FILE ID: RRF005 = S6B1836E.D RRF010 = S6B1836F.D RRF025 = S6B1831B.D RRF040 = S6B1834.D RRF060 = S6B1836D.D
RRF080 = S6B1833.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
Phenol	1.397	1.558	1.612	1.440	1.645	1.395					1.508	7.4
Bis(2-chloroethyl)ether	0.745	0.775	0.806	0.703	0.788	0.683					0.750	6.5
2-Chlorophenol	1.142	1.263	1.321	1.218	1.374	1.182					1.250	7.0
1,3-Dichlorobenzene	1.465	1.503	1.446	1.391	1.470	1.259					1.422	6.2
1,4-Dichlorobenzene	1.433	1.552	1.495	1.385	1.512	1.333					1.452	5.7
1,2-Dichlorobenzene	1.330	1.488	1.428	1.330	1.455	1.259					1.382	6.4
2-Methylphenol	1.262	1.250	1.318	1.215	1.319	1.171					1.256	4.6
2,2´-oxybis(1-Chloropropane)	1.181	1.269	1.383	1.209	1.334	1.148					1.254	7.3
4-Methylphenol	1.176	1.283	1.395	1.339	1.396	1.189					1.297	7.5
N-Nitroso-di-n-propylamine	0.782	0.860	0.905	0.853	0.911	0.780					0.848	6.7
Hexachloroethane	0.508	0.567	0.536	0.490	0.548	0.474					0.521	6.9
Nitrobenzene	0.323	0.340	0.344	0.279	0.313	0.262					0.310	10.7
Isophorone	0.597	0.641	0.641	0.544	0.580	0.496					0.583	9.7
2-Nitrophenol	0.173	0.181	0.187	0.160	0.175	0.149					0.171	8.3
2,4-Dimethylphenol	0.339	0.338	0.279	0.201	0.302	0.249					0.285	18.9
2,4-Dichlorophenol	0.286	0.311	0.300	0.263	0.279	0.235					0.279	9.7
1,2,4-Trichlorobenzene	0.330	0.338	0.324	0.282	0.311	0.258					0.307	10.1
Naphthalene	1.005	1.068	1.005	0.861	0.940	0.775					0.942	11.4
4-Chloroaniline	0.418	0.444	0.429	0.376	0.400	0.316					0.397	11.6
Bis(2-chloroethoxy)methane	0.352	0.387	0.381	0.322	0.349	0.295					0.348	10.1
Hexachlorobutadiene	0.159	0.166	0.151	0.132	0.146	0.120					0.146	11.6
4-Chloro-3-methylphenol	0.280	0.313	0.310	0.266	0.282	0.240					0.282	9.7
2-Methylnaphthalene	0.719	0.752	0.726	0.652	0.682	0.574					0.684	9.4
Hexachlorocyclopentadiene	0.211	0.280	0.244	0.145	0.256	0.093					0.205	35.2
2,4,6-Trichlorophenol	0.349	0.371	0.357	0.323	0.390	0.305					0.349	8.9
2,4,5-Trichlorophenol		0.367	0.389	0.343	0.406	0.326					0.366	8.9
2-Chloronaphthalene	1.034	1.190	1.137	1.001	1.199	0.970					1.088	9.1

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

6 - FORM VI SV-2

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: L2554 SAS No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date(s): 12/11/2012 12/11/2012

Calibration Times: 12:05 17:56

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

LAB FILE ID: RRF005 = S6B1836E.D RRF010 = S6B1836F.D RRF025 = S6B1831B.D RRF040 = S6B1834.D RRF060 = S6B1836D.D
RRF080 = S6B1833.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					RRF	% RSD
2-Nitroaniline		0.287	0.300	0.263	0.302	0.249					0.280	8.4
Dimethylphthalate	1.234	1.440	1.345	1.186	1.413	1.134					1.292	9.7
Acenaphthylene	1.801	2.022	1.944	1.685	2.020	1.600					1.845	9.7
2,6-Dinitrotoluene	0.279	0.362	0.326	0.287	0.346	0.276					0.313	11.9
3-Nitroaniline		0.364	0.361	0.329	0.378	0.309					0.348	8.2
Acenaphthene	1.120	1.307	1.200	1.057	1.252	1.017					1.159	9.8
2,4-Dinitrophenol		0.100	0.144	0.151	0.201	0.161					0.152	23.9
4-Nitrophenol		0.149	0.181	0.159	0.194	0.156					0.168	11.4
Dibenzofuran	1.606	1.830	1.722	1.480	1.806	1.445					1.648	10.0
2,4-Dinitrotoluene	0.382	0.436	0.425	0.379	0.454	0.360					0.406	9.2
Diethylphthalate	1.271	1.357	1.397	1.203	1.414	1.158					1.300	8.2
4-Chlorophenyl-phenylether	0.622	0.687	0.635	0.586	0.690	0.558					0.630	8.5
Fluorene	1.324	1.545	1.457	1.299	1.517	1.217					1.393	9.5
4-Nitroaniline		0.371	0.391	0.336	0.393	0.332					0.364	8.0
4,6-Dinitro-2-methylphenol		0.089	0.114	0.107	0.140	0.112					0.112	16.5
N-Nitrosodiphenylamine	0.580	0.681	0.657	0.566	0.669	0.558					0.619	9.1
4-Bromophenyl-phenylether	0.166	0.201	0.186	0.161	0.194	0.159					0.178	10.1
Hexachlorobenzene	0.192	0.198	0.193	0.161	0.203	0.166					0.185	9.6
Pentachlorophenol		0.084	0.112	0.102	0.133	0.111					0.109	16.3
Phenanthrene	1.027	1.154	1.100	0.949	1.130	0.934					1.049	8.9
Anthracene	1.016	1.152	1.128	0.943	1.160	0.961					1.060	9.3
Carbazole	1.023	1.105	1.116	0.946	1.131	0.934					1.043	8.4
Di-n-butylphthalate	1.141	1.262	1.341	1.140	1.356	1.137					1.230	8.4
Fluoranthene	1.105	1.178	1.227	1.055	1.260	1.048					1.145	7.8
Pyrene	1.106	1.284	1.216	0.993	1.191	0.954					1.124	11.6
Butylbenzylphthalate	0.494	0.574	0.599	0.498	0.594	0.484					0.540	10.0
3,3´-Dichlorobenzidine	0.402	0.441	0.433	0.357	0.434	0.351					0.403	10.0

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: L2554 SAS No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date(s): 12/11/2012 12/11/2012

Calibration Times: 12:05 17:56

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

LAB FILE ID: RRF005 = S6B1836E.D RRF010 = S6B1836F.D RRF025 = S6B1831B.D RRF040 = S6B1834.D RRF060 = S6B1836D.D
RRF080 = S6B1833.D

COMPOUND	RRF005	RRF010	RRF025	RRF040	RRF060	RRF080					$\overline{RRF}$	% RSD
Benzo(a)anthracene	1.091	1.261	1.196	0.972	1.165	0.958					1.107	11.1
Chrysene	1.058	1.121	1.098	0.898	1.102	0.874					1.025	10.7
Bis(2-ethylhexyl)phthalate	0.784	0.885	0.898	0.720	0.875	0.728					0.815	10.0
Di-n-octylphthalate	1.581	1.652	1.559	1.437	1.513	1.369					1.519	6.8
Benzo(b)fluoranthene	1.223	1.429	1.193	1.142	1.162	1.134					1.214	9.1
Benzo(k)fluoranthene	1.373	1.362	1.241	1.152	1.303	1.082					1.252	9.3
Benzo(a)pyrene	1.148	1.278	1.134	1.079	1.144	1.014					1.133	7.8
Indeno(1,2,3-cd)pyrene	1.400	1.551	1.366	1.276	1.389	1.239					1.370	8.0
Dibenzo(a,h)anthracene	1.168	1.297	1.118	1.075	1.165	1.032					1.142	8.0
Benzo(g,h,i)perylene	1.163	1.313	1.134	1.082	1.178	1.043					1.152	8.1

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date: 12/13/2012 Time: 14:56

Lab File ID: S6B1891.D Init. Calib. Date(s): 12/11/2012 12/11/2012

EPA Sample No.(SSTD020##) SSTDD0256A Init. Calib. Time(s): 12:05 17:56

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

COMPOUND	RRF	RRFD02	MIN RRF	%D	MAX %D
Phenol	1.508	1.654	0.010	9.7	20.0
Bis(2-chloroethyl)ether	0.750	0.903	0.010	20.4	20.0
2-Chlorophenol	1.250	1.310	0.010	4.8	20.0
1,3-Dichlorobenzene	1.422	1.481	0.010	4.2	20.0
1,4-Dichlorobenzene	1.452	1.523	0.010	5.0	20.0
1,2-Dichlorobenzene	1.382	1.430	0.010	3.5	20.0
2-Methylphenol	1.256	1.215	0.010	-3.3	20.0
2,2'-oxybis(1-Chloropropane)	1.254	1.438	0.010	14.6	20.0
4-Methylphenol	1.297	1.336	0.010	3.0	20.0
N-Nitroso-di-n-propylamine	0.848	1.011	0.050	19.1	20.0
Hexachloroethane	0.521	0.568	0.010	9.1	20.0
Nitrobenzene	0.310	0.407	0.010	31.0	20.0
Isophorone	0.583	0.713	0.010	22.2	20.0
2-Nitrophenol	0.171	0.194	0.010	13.4	20.0
2,4-Dimethylphenol	0.285	0.277	0.010	-2.6	20.0
2,4-Dichlorophenol	0.279	0.309	0.010	10.6	20.0
1,2,4-Trichlorobenzene	0.307	0.343	0.010	11.7	20.0
Naphthalene	0.942	1.015	0.010	7.7	20.0
4-Chloroaniline	0.397	0.426	0.010	7.3	20.0
Bis(2-chloroethoxy)methane	0.348	0.399	0.010	14.8	20.0
Hexachlorobutadiene	0.146	0.175	0.010	20.3	20.0
4-Chloro-3-methylphenol	0.282	0.331	0.010	17.3	20.0
2-Methylnaphthalene	0.684	0.756	0.010	10.5	20.0
Hexachlorocyclopentadiene	0.205	0.276	0.050	34.6	20.0
2,4,6-Trichlorophenol	0.349	0.393	0.010	12.5	20.0
2,4,5-Trichlorophenol	0.366	0.382	0.010	4.3	20.0
2-Chloronaphthalene	1.088	1.128	0.010	3.7	20.0
2-Nitroaniline	0.280	0.351	0.010	25.1	20.0
Dimethylphthalate	1.292	1.383	0.010	7.0	20.0
Acenaphthylene	1.845	1.957	0.010	6.0	20.0
2,6-Dinitrotoluene	0.313	0.327	0.010	4.5	20.0
3-Nitroaniline	0.348	0.357	0.010	2.5	20.0
Acenaphthene	1.159	1.209	0.010	4.3	20.0
2,4-Dinitrophenol	0.152	0.189	0.050	24.7	20.0
4-Nitrophenol	0.168	0.219	0.050	30.3	20.0
Dibenzofuran	1.648	1.752	0.010	6.3	20.0
2,4-Dinitrotoluene	0.406	0.448	0.010	10.3	20.0
Diethylphthalate	1.300	1.423	0.010	9.4	20.0
4-Chlorophenyl-phenylether	0.630	0.686	0.010	9.0	20.0
Fluorene	1.393	1.485	0.010	6.6	20.0
4-Nitroaniline	0.364	0.369	0.010	1.1	20.0
4,6-Dinitro-2-methylphenol	0.112	0.132	0.010	17.6	20.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date: 12/13/2012 Time: 14:56

Lab File ID: S6B1891.D Init. Calib. Date(s): 12/11/2012 12/11/2012

EPA Sample No.(SSTD020##) SSTDD0256A Init. Calib. Time(s): 12:05 17:56

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

COMPOUND	RRF	RRFD02	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.619	0.655	0.010	5.9	20.0
4-Bromophenyl-phenylether	0.178	0.202	0.010	13.5	20.0
Hexachlorobenzene	0.185	0.211	0.010	13.7	20.0
Pentachlorophenol	0.109	0.129	0.010	18.9	20.0
Phenanthrene	1.049	1.103	0.010	5.2	20.0
Anthracene	1.060	1.120	0.010	5.6	20.0
Carbazole	1.043	1.085	0.010	4.1	20.0
Di-n-butylphthalate	1.230	1.301	0.010	5.8	20.0
Fluoranthene	1.145	1.222	0.010	6.7	20.0
Pyrene	1.124	1.192	0.010	6.0	20.0
Butylbenzylphthalate	0.540	0.566	0.010	4.7	20.0
3,3´-Dichlorobenzidine	0.403	0.440	0.010	9.2	20.0
Benzo(a)anthracene	1.107	1.146	0.010	3.6	20.0
Chrysene	1.025	1.041	0.010	1.5	20.0
Bis(2-ethylhexyl)phthalate	0.815	0.820	0.010	0.7	20.0
Di-n-octylphthalate	1.519	1.499	0.010	-1.3	20.0
Benzo(b)fluoranthene	1.214	1.268	0.010	4.4	20.0
Benzo(k)fluoranthene	1.252	1.200	0.010	-4.2	20.0
Benzo(a)pyrene	1.133	1.133	0.010	0.0	20.0
Indeno(1,2,3-cd)pyrene	1.370	1.344	0.010	-1.9	20.0
Dibenzo(a,h)anthracene	1.142	1.125	0.010	-1.5	20.0
Benzo(g,h,i)perylene	1.152	1.117	0.010	-3.1	20.0

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date: 12/14/2012 Time: 11:31

Lab File ID: S6B1931.D Init. Calib. Date(s): 12/11/2012 12/11/2012

EPA Sample No.(SSTD020##) SSTD0256B Init. Calib. Time(s): 12:05 17:56

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.508	1.740	0.010	15.4	20.0
Bis(2-chloroethyl)ether	0.750	0.856	0.010	14.2	20.0
2-Chlorophenol	1.250	1.276	0.010	2.1	20.0
1,3-Dichlorobenzene	1.422	1.497	0.010	5.2	20.0
1,4-Dichlorobenzene	1.452	1.535	0.010	5.7	20.0
1,2-Dichlorobenzene	1.382	1.445	0.010	4.6	20.0
2-Methylphenol	1.256	1.155	0.010	-8.1	20.0
2,2'-oxybis(1-Chloropropane)	1.254	1.311	0.010	4.5	20.0
4-Methylphenol	1.297	1.327	0.010	2.4	20.0
N-Nitroso-di-n-propylamine	0.848	0.973	0.050	14.7	20.0
Hexachloroethane	0.521	0.539	0.010	3.6	20.0
Nitrobenzene	0.310	0.399	0.010	28.7	20.0
Isophorone	0.583	0.697	0.010	19.6	20.0
2-Nitrophenol	0.171	0.195	0.010	14.2	20.0
2,4-Dimethylphenol	0.285	0.284	0.010	-0.2	20.0
2,4-Dichlorophenol	0.279	0.304	0.010	8.9	20.0
1,2,4-Trichlorobenzene	0.307	0.351	0.010	14.4	20.0
Naphthalene	0.942	1.014	0.010	7.6	20.0
4-Chloroaniline	0.397	0.424	0.010	6.8	20.0
Bis(2-chloroethoxy)methane	0.348	0.388	0.010	11.5	20.0
Hexachlorobutadiene	0.146	0.180	0.010	23.5	20.0
4-Chloro-3-methylphenol	0.282	0.336	0.010	19.3	20.0
2-Methylnaphthalene	0.684	0.739	0.010	8.0	20.0
Hexachlorocyclopentadiene	0.205	0.256	0.050	24.8	20.0
2,4,6-Trichlorophenol	0.349	0.387	0.010	10.9	20.0
2,4,5-Trichlorophenol	0.366	0.412	0.010	12.5	20.0
2-Chloronaphthalene	1.088	1.128	0.010	3.6	20.0
2-Nitroaniline	0.280	0.347	0.010	23.7	20.0
Dimethylphthalate	1.292	1.387	0.010	7.4	20.0
Acenaphthylene	1.845	1.940	0.010	5.1	20.0
2,6-Dinitrotoluene	0.313	0.334	0.010	6.7	20.0
3-Nitroaniline	0.348	0.361	0.010	3.7	20.0
Acenaphthene	1.159	1.215	0.010	4.8	20.0
2,4-Dinitrophenol	0.152	0.170	0.050	12.0	20.0
4-Nitrophenol	0.168	0.225	0.050	33.8	20.0
Dibenzofuran	1.648	1.748	0.010	6.1	20.0
2,4-Dinitrotoluene	0.406	0.450	0.010	10.8	20.0
Diethylphthalate	1.300	1.386	0.010	6.6	20.0
4-Chlorophenyl-phenylether	0.630	0.691	0.010	9.8	20.0
Fluorene	1.393	1.470	0.010	5.5	20.0
4-Nitroaniline	0.364	0.373	0.010	2.4	20.0
4,6-Dinitro-2-methylphenol	0.112	0.128	0.010	13.9	20.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2554 Mod. Ref No.: SDG No.: SL2554

Instrument ID: S6 Calibration Date: 12/14/2012 Time: 11:31

Lab File ID: S6B1931.D Init. Calib. Date(s): 12/11/2012 12/11/2012

EPA Sample No.(SSTD020##) SSTD0256B Init. Calib. Time(s): 12:05 17:56

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

COMPOUND	$\overline{RRF}$	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.619	0.657	0.010	6.2	20.0
4-Bromophenyl-phenylether	0.178	0.208	0.010	16.8	20.0
Hexachlorobenzene	0.185	0.226	0.010	21.7	20.0
Pentachlorophenol	0.109	0.119	0.010	9.6	20.0
Phenanthrene	1.049	1.121	0.010	6.9	20.0
Anthracene	1.060	1.156	0.010	9.0	20.0
Carbazole	1.043	1.092	0.010	4.7	20.0
Di-n-butylphthalate	1.230	1.304	0.010	6.0	20.0
Fluoranthene	1.145	1.272	0.010	11.1	20.0
Pyrene	1.124	1.169	0.010	4.0	20.0
Butylbenzylphthalate	0.540	0.549	0.010	1.6	20.0
3,3'-Dichlorobenzidine	0.403	0.434	0.010	7.6	20.0
Benzo(a)anthracene	1.107	1.132	0.010	2.2	20.0
Chrysene	1.025	1.047	0.010	2.2	20.0
Bis(2-ethylhexyl)phthalate	0.815	0.795	0.010	-2.5	20.0
Di-n-octylphthalate	1.519	1.440	0.010	-5.2	20.0
Benzo(b)fluoranthene	1.214	1.209	0.010	-0.4	20.0
Benzo(k)fluoranthene	1.252	1.210	0.010	-3.4	20.0
Benzo(a)pyrene	1.133	1.111	0.010	-1.9	20.0
Indeno(1,2,3-cd)pyrene	1.370	1.346	0.010	-1.7	20.0
Dibenzo(a,h)anthracene	1.142	1.129	0.010	-1.2	20.0
Benzo(g,h,i)perylene	1.152	1.130	0.010	-2.0	20.0

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QA/QC Review of TAL Metals Data for
Spectrum Analytical, Inc., SDG: SL2554

1 Soil Sample and 1 Field Duplicate
Collected December 11, 2012

Prepared by: Donald Anné
January 24, 2013

Holding Times: Samples were analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, and preparation blanks reported target metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for target metals were within control limits (80-120%).

Spike Sample Recovery: The percent recoveries for antimony and chromium were below control limits, but were not below 10% for soil spike sample SO1-MW5S. Positive and "not detected" results for antimony and chromium should be considered estimated (J) in associated soil samples.

Laboratory Duplicates: The relative percent difference for chromium was above the allowable maximum (35%) for soil duplicate sample SO1-MW5D. Positive results for chromium should be considered estimated (J) in associated soil samples.

Field Duplicate: The relative percent differences for antimony, beryllium, chromium, copper, and mercury were above the allowable maximum (35%) for soil field duplicate pair SO1-MW5/DUP1 (attached table). Results for these metals should be considered estimated (J) in samples SO1-MW5 and DUP1.

Laboratory Control Sample: The recoveries for TAL metals were within control limits for soil samples LCS-69709 and LCS-69763.

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ICP Serial Dilution: The %Ds for applicable TAL metals were below the allowable maximum (10%) for soil serial dilution sample SO1-MW5, as required.

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

Percent Solids: The percent solids for soil samples in this SDG were greater than 50%.

TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. SL2554

S1= SO1-MW5 **S2=** DUP1

Analyte	S1	S2	RPD (%)	
aluminum	19100	16400	15%	
antimony	1.5	2.4	46%	*
arsenic	12.2	10.4	16%	
barium	187	184	2%	
beryllium	1.2	0.79	41%	*
cadmium	3.6	5.0	33%	
calcium	1940	2500	25%	
chromium	45.0	82.3	59%	*
cobalt	17.9	17.7	1%	
copper	174	299	53%	*
iron	43200	39700	8%	
lead	101	135	29%	
magnesium	5760	6640	14%	
manganese	930	814	13%	
mercury	0.12	0.22	59%	*
nickel	49.1	67.4	31%	
potassium	1570	1660	6%	
selenium	2.5	2.4	4%	
silver	**0.87**	**1.1**	NC	
sodium	146	166	13%	
thallium	**0.64**	**0.38**	NC	
vanadium	35.8	32.0	11%	
zinc	220	303	32%	

* RPD is above the allowable maximum (35%)

All results are in units of mg/kg.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.: SO1-MW5S

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

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

% Solids for Sample: 72.8

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75-125	17.6		2.4		29.5	52	N	P
Arsenic	75-125	43.2		10.4		29.5	111		P
Barium	75-125	833		184		590	110		P
Beryllium	75-125	16.9		0.79		14.7	110		P
Cadmium	75-125	21.0		5.0		14.7	109		P
Chromium	75-125	114		82.3		59.0	54	N	P
Cobalt	75-125	174		17.7		147	106		P
Copper		334		299		73.2	47		P
Lead		147		135		29.5	43		P
Nickel	75-125	217		67.4		147	102		P
Selenium	75-125	34.8		2.4		29.5	110		P
Silver	75-125	82.4		1.1	B	73.2	111		P
Thallium	75-125	28.9		0.29	B	29.5	97		P
Vanadium	75-125	185		32.0		147	104		P
Zinc	75-125	435		303		147	90		P
Mercury	75-125	1.3		0.22		1.1	103		CV

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO.

SO1-MW5D

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2554

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

% Solids for Sample: 72.8 % Solids for Duplicate: 72.8

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		16389.4033		14293.0099		13.7		P
Antimony	1.3	2.3866		1.8461		25.5		P
Arsenic		10.4331		7.9282		27.3	*	P
Barium		184.2615		178.8015		3		P
Beryllium	0.3	0.7854		0.7479		4.9		P
Cadmium		4.9989		5.2857		5.6		P
Calcium		2495.4131		2281.5958		9		P
Chromium		82.3023		52.2184		44.7	*	P
Cobalt	3.2	17.6744		14.6603		18.6		P
Copper		299.0429		229.0350		26.5	*	P
Iron		39730.9487		32953.6775		18.6		P
Lead		134.5316		130.5675		3		P
Magnesium		6644.3390		5412.2352		20.4	*	P
Manganese		813.5427		888.4351		8.8		P
Nickel		67.4318		52.5639		24.8	*	P
Potassium		1662.9692		1475.0217		12		P
Selenium	1.9	2.3526		2.5017		6.1		P
Silver		1.0982	B	0.9427	B	15.2		P
Sodium	65.0	166.1741		130.8600		23.8		P
Thallium		0.3791	B	0.4530	B	17.8		P
Vanadium		32.0064		27.6910		14.5		P
Zinc		302.7736		256.5680		16.5		P
Mercury	0.0	0.2233		0.3152		34.1	*	CV

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Data Usability Summary Report for
Spectrum Analytical, Inc., SDG: SL2625 & SL2626

5 Ground Water Samples, 1 Field Duplicate,
and 2 Trip Blanks
Collected December 20, 2012

Prepared by: Donald Anné
January 24, 2013

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatiles, semi-volatiles and TAL metals for 5 ground water samples and 1 field duplicate, and the results of volatiles only for 2 trip blanks.

The overall performances of the analyses are acceptable. Spectrum Analytical, Inc. did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile result for methylene chloride were flagged as "not detected" (U) for samples MW-3 because the level reported in the samples were not significantly greater than (more than 10 times) the highest associated blank level.

- The volatile results for 3 compounds in sample MW-4 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for these 3 compounds marked "E" in the undiluted sample MW-4 were qualified as estimated (J).

- The volatile results for 8 compounds in sample MW-2 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for these 8 compounds marked "E" in the undiluted sample MW-2 were qualified as estimated (J).

- The volatile results for 10 compounds in samples MW-5 and DUP-1 were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The results for these 10 compounds marked "E" in the undiluted samples MW-5 and DUP-1 were qualified as estimated (J).

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- Positive volatile results for 1,3,5-trimethylbenzene, n-butylbenzene, and naphthalene were flagged as "estimated" (J) in samples MW-5 and DUP-1 because relative percent differences for 1,3,5-trimethylbenzene, n-butylbenzene, and naphthalene were above the allowable maximum in the soil field duplicate pair MW-5/DUP-1.

- Positive metal results for antimony were flagged as "estimated" (J) in samples MW-5 and DUP-1 because the percent recoveries for antimony and chromium were below control limits, but were not below 10% in the associated soil spike sample.

- The "not detected" metal results for antimony were flagged as "estimated" (J) in samples MW-1, MW-2, MW-3, and MW-4 because the percent recoveries for antimony and chromium were below control limits, but were not below 30% in the associated aqueous spike sample.

- Positive metal results for aluminum, barium, and iron were flagged as "estimated" (J) in samples MW-5 and DUP-1 because the relative percent differences for aluminum, barium, and iron were above the allowable maximum in aqueous field duplicate pair MW-5/DUP-1.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Method 8260C Volatiles Data for Spectrum Analytical, Inc., SDG: SL2625 & SL2626

5 Ground Water Sample, 1 Field Duplicate, and 2 Trip Blanks Collected December 20, 2012

Prepared by: Donald Anné
January 24, 2013

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260C.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260C.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for iodomethane and 2,2-dichloropropane were above the allowable maximum (25%) on 12-24-12 (V8B7222.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of method blanks reported target compounds as not detected. Trip blank (lab ID: L2625-04A) contained a trace of methylene chloride (1.3 ug/L). Trip blank (lab ID: L2626-04A) contained traces of methylene chloride (0.53 ug/L), dibromochloromethane (0.95 ug/L), and bromoform (1.7 ug/L). Positive results for methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples. Positive results for dibromochloromethane and bromoform that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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Surrogate Recovery: The surrogate recoveries were within control limits for water samples.

Matrix Spike/Matrix Spike Duplicate: One of 68 relative percent differences for target compounds was above the allowable maximum and 42 of 136 percent recoveries were outside QC limits for aqueous MS/MSD sample MW5. This was due to high concentrations of target compounds in the unspiked sample. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within the QC limits for aqueous sample LCS-69910. The relative percent differences for target compounds were below the allowable maximum and the %Rs were within QC limits for aqueous samples LCS-69949 and LCSD-69949.

Field Duplicate: The relative percent differences for 1,3,5-trimethylbenzene, n-butylbenzene, and naphthalene were above the allowable maximum (20%) for aqueous field duplicate pair MW-5/DUP-1 (attached table). Results for 1,3,5-trimethylbenzene, n-butylbenzene, and naphthalene should be considered estimated (J) in samples MW-5 and DUP-1.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

There are results for 8 compounds in sample MW-2; 3 compounds in sample MW-4; and 10 compounds in samples MW-5 and DUP-1 that was quantitated by extrapolating data above the highest calibration standard and marked 'E' by the laboratory. The sample was diluted by the laboratory and re-analyzed; therefore, the result for cis-1,2-dichloroethene that is flagged as 'E' in the undiluted sample should be considered estimated (J). The use of the diluted results for trichloroethene is recommended in samples MW-2, MW-5 and DUP-1. The use of the diluted result for cis-1,2-dichloroethene is recommended in sample MW-4 It is recommended that the undiluted results for the sample be used for all other compounds.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. SL2626

S1= MW-5 **S2=** DUP-1

Analyte	S1	S2	RPD (%)	
vinyl chloride	5900	6300	7%	
chloroethane	ND	**1.6**	NC	
1,1-dichloroethene	2700	2700	0%	
acetone	130	150	14%	
carbon disulfide	ND	**4.1**	NC	
methylene chloride	600	610	2%	
trans-1,2-dichloroethene	320	290	10%	
1,1-dichloroethane	1700	1600	6%	
cis-1,2-dichloroethene	9900	8900	11%	
chloroform	**3.5**	**3.3**	NC	
1,1,1-trichloroethane	5000	4400	13%	
1,2-dichloroethane	8.0	7.2	11%	
benzene	8.2	8.4	2%	
trichloroethene	*410000*	*390000*	5%	
4-methyl-2-pentanone	23	22	4%	
toluene	300	280	7%	
1,1,2-trichloroethane	8.1	6.9	16%	
tetrachloroethene	2700	2600	4%	
chlorobenzene	**0.60**	**0.63**	NC	
ethylbenzene	48	52	8%	
m,p-xylene	130	140	7%	
o-xylene	72	80	11%	
xylene (total)	200	220	10%	
isopropylbenzene	6.3	7.5	17%	
n-propylbenzene	11	13	17%	
1,3,5-trimethylbenzene	26	32	21%	*
1,2,4-trimethylbenzene	91	110	19%	
sec-butylbenzene	**4.0**	5.1	NC	
1,4-dichlorobenzene	**0.52**	**0.54**	NC	
n-butylbenzene	8.6	11.0	24%	*
1,2,4-trichlorobenzene	**1.2**	**1.2**	NC	
1,2,3-trichlorobenzene	**0.78**	**0.75**	NC	
naphthalene	20	25	22%	*

* RPD is above the allowable maximum (20%)

All results are in ug/L

Italic numbers are diluted values

Bold numbers were values that below the CRQL or above the high standard.

ND - Not detected.

NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

Chloroform	50.0000	44.5932	82		7		0-40	65-135
1,1,1-Trichloroethane	50.0000	3965.8249	-2048	*	~~-94~~	23	0-40	65-130
1,1-Dichloropropene	50.0000	42.0624	84		6		0-40	75-130
Carbon tetrachloride	50.0000	32.3441	65	*	2		0-40	65-140
1,2-Dichloroethane	50.0000	50.3805	85		7		0-40	70-130
Benzene	50.0000	55.8489	95		12		0-40	80-120
Trichloroethene	50.0000	8173.6200	-5707	*	~~-42~~	30	0-40	70-125
1,2-Dichloropropane	50.0000	18.4976	37	*	10		0-40	75-125
Dibromomethane	50.0000	42.2469	84		5		0-40	75-125
Bromodichloromethane	50.0000	42.6096	85		7		0-40	75-120
cis-1,3-Dichloropropene	50.0000	47.2755	95		8		0-40	70-130
4-Methyl-2-pentanone	50.0000	77.3910	109		2		0-40	60-135
Toluene	50.0000	276.1822	-50	*	~~-443~~	9	0-40	75-120
trans-1,3-Dichloropropene	50.0000	52.7487	105		5		0-40	55-140
1,1,2-Trichloroethane	50.0000	54.3174	93		3		0-40	75-125
1,3-Dichloropropane	50.0000	39.1359	78		17		0-40	75-125
Tetrachloroethene	50.0000	2271.6342	-789	*	~~-79~~	16	0-40	45-150
2-Hexanone	50.0000	85.5513	171	*	8		0-40	55-130
Dibromochloromethane	50.0000	50.5647	101		7		0-40	60-135
1,2-Dibromoethane	50.0000	50.5227	101		9		0-40	80-120
Chlorobenzene	50.0000	48.3288	95		9		0-40	80-120
1,1,1,2-Tetrachloroethane	50.0000	48.8073	98		9		0-40	80-130
Ethylbenzene	50.0000	87.8282	79		8		0-40	75-125
m,p-Xylene	100.0000	200.0652	71	*	18		0-40	75-130
o-Xylene	50.0000	108.7446	73	*	18		0-40	80-120
Xylene (Total)	150.0000	308.8098	72	*	18		0-40	81-121
Styrene	50.0000	50.1518	100		9		0-40	65-135
Bromoform	50.0000	53.8372	108		7		0-40	70-130
Isopropylbenzene	50.0000	49.8770	87		4		0-40	75-125
1,1,2,2-Tetrachloroethane	50.0000	54.0207	108		11		0-40	65-130
Bromobenzene	50.0000	46.1904	92		10		0-40	75-125
1,2,3-Trichloropropane	50.0000	53.9158	108		11		0-40	75-125
n-Propylbenzene	50.0000	52.0006	83		1		0-40	70-130
2-Chlorotoluene	50.0000	45.8862	92		10		0-40	75-125
1,3,5-Trimethylbenzene	50.0000	62.2206	71	*	6		0-40	75-130
4-Chlorotoluene	50.0000	46.4605	93		10		0-40	75-130
tert-Butylbenzene	50.0000	44.3310	89		9		0-40	70-130
1,2,4-Trimethylbenzene	50.0000	112.6245	43	*	~~55~~	21	0-40	75-130
sec-Butylbenzene	50.0000	43.8995	80		7		0-40	70-125
4-Isopropyltoluene	50.0000	44.5673	89		5		0-40	75-130
1,3-Dichlorobenzene	50.0000	44.7899	90		10		0-40	75-125
1,4-Dichlorobenzene	50.0000	44.8923	89		10		0-40	75-125
n-Butylbenzene	50.0000	46.2362	75		5		0-40	70-135
1,2-Dichlorobenzene	50.0000	45.6351	91		10		0-40	70-120
1,2-Dibromo-3-chloropropan	50.0000	52.4704	105		10		0-40	50-130
1,2,4-Trichlorobenzene	50.0000	42.1854	82		13		0-40	65-135
Hexachlorobutadiene	50.0000	24.1573	48	*	9		0-40	50-140

som12.12.17.A

$$RPD = \frac{|\text{sample conc} - \text{dup conc}|}{(\text{sample conc} + \text{dup conc})/2} \times 100\%$$

SW846

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	41.5903	82		15		0-40	55-140
Naphthalene	50.0000	66.8138	94		4		0-40	55-140

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

* Values outside of QC limits

RPD: 11 out of 68 outside limits

Spike Recovery: 42 out of 136 outside limits

COMMENTS:

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	32.0052	64		30-155
Chloromethane	50.0000	0.0000	48.6498	97		40-125
Vinyl chloride	50.0000	5867.5471	6084.9634	435	*	50-145
Bromomethane	50.0000	0.0000	37.2577	75		30-145
Chloroethane	50.0000	0.0000	54.3873	109		60-135
Trichlorofluoromethane	50.0000	0.0000	34.6772	69		60-145
1,1-Dichloroethene	50.0000	2679.7889	2158.9655	-1042	*	70-130
Acetone	50.0000	134.9548	205.2097	141	*	40-140
Iodomethane	50.0000	0.0000	44.5801	89		72-121
Carbon disulfide	50.0000	3.5307	45.2041	83		35-160
Methylene chloride	50.0000	597.7820	673.9541	152	*	55-140
trans-1,2-Dichloroethene	50.0000	319.0776	312.1001	-14	*	60-140
Methyl tert-butyl ether	50.0000	0.0000	24.2153	48	*	65-125
1,1-Dichloroethane	50.0000	1652.3340	1842.5907	381	*	70-135
Vinyl acetate	50.0000	0.0000	41.9286	84		38-163
2-Butanone	50.0000	0.0000	1092.9929	2186	*	30-150
cis-1,2-Dichloroethene	50.0000	9949.4366	10373.1099	847	*	70-125
2,2-Dichloropropane	50.0000	0.0000	5.6447	11	*	70-135
Bromochloromethane	50.0000	0.0000	40.2329	80		65-130
Chloroform	50.0000	3.5004	41.8408	77		65-135
1,1,1-Trichloroethane	50.0000	4989.9970	4618.6039	-743	*	65-130
1,1-Dichloropropene	50.0000	0.0000	39.7329	79		75-130
Carbon tetrachloride	50.0000	0.0000	32.8890	66		65-140
1,2-Dichloroethane	50.0000	7.9686	47.6491	79		70-130
Benzene	50.0000	8.2290	50.5392	85		80-120
Trichloroethene	50.0000	11026.9762	9161.9552	-3730	*	70-125
1,2-Dichloropropane	50.0000	0.0000	20.5170	41	*	75-125
Dibromomethane	50.0000	0.0000	40.3805	81		75-125
Bromodichloromethane	50.0000	0.0000	39.5598	79		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	43.5928	87		70-130
4-Methyl-2-pentanone	50.0000	22.8852	76.3553	107		60-135
Toluene	50.0000	301.4170	310.9594	19	*	75-120
trans-1,3-Dichloropropene	50.0000	0.0000	50.2490	100		55-140
1,1,2-Trichloroethane	50.0000	8.0654	52.8200	90		75-125
1,3-Dichloropropane	50.0000	0.0000	33.1105	66	*	75-125
Tetrachloroethene	50.0000	2666.3252	2495.6261	-341	*	45-150
2-Hexanone	50.0000	0.0000	79.2503	159	*	55-130
Dibromochloromethane	50.0000	0.0000	46.9566	94		60-135
1,2-Dibromoethane	50.0000	0.0000	46.0441	92		80-120
Chlorobenzene	50.0000	0.5964	44.0054	87		80-120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	44.6332	89		80-130
Ethylbenzene	50.0000	48.1491	91.1417	86		75-125
m,p-Xylene	100.0000	128.8443	214.3351	85		75-130
o-Xylene	50.0000	72.1553	116.1934	88		80-120

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	200.9996	330.5285	86		81-121
Styrene	50.0000	0.0000	46.0120	92		65-135
Bromoform	50.0000	0.0000	50.1932	100		70-130
Isopropylbenzene	50.0000	6.2956	48.1670	84		75-125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.3049	97		65-130
Bromobenzene	50.0000	0.0000	41.8855	84		75-125
1,2,3-Trichloropropane	50.0000	0.0000	48.4140	97		75-125
n-Propylbenzene	50.0000	10.6823	51.4624	82		70-130
2-Chlorotoluene	50.0000	0.0000	41.3883	83		75-125
1,3,5-Trimethylbenzene	50.0000	26.4769	64.3977	76		75-130
4-Chlorotoluene	50.0000	0.0000	41.9033	84		75-130
tert-Butylbenzene	50.0000	0.0000	40.4790	81		70-130
1,2,4-Trimethylbenzene	50.0000	91.1976	128.8417	75		75-130
sec-Butylbenzene	50.0000	4.0289	41.3013	75		70-125
4-Isopropyltoluene	50.0000	0.0000	42.3151	85		75-130
1,3-Dichlorobenzene	50.0000	0.0000	40.5675	81		75-125
1,4-Dichlorobenzene	50.0000	0.5203	40.6263	80		75-125
n-Butylbenzene	50.0000	8.6335	44.3668	71		70-135
1,2-Dichlorobenzene	50.0000	0.0000	41.3302	83		70-120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	47.5758	95		50-130
1,2,4-Trichlorobenzene	50.0000	1.1516	37.0964	72		65-135
Hexachlorobutadiene	50.0000	0.0000	22.0051	44	*	50-140
1,2,3-Trichlorobenzene	50.0000	0.7827	36.0419	71		55-140
Naphthalene	50.0000	19.6015	65.1896	91		55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	28.0031	56		13		0-40	30-155
Chloromethane	50.0000	51.2117	102		5		0-40	40-125
Vinyl chloride	50.0000	4918.6791	-1898	*	~~319~~ 21		0-40	50-145
Bromomethane	50.0000	49.4104	99		28		0-40	30-145
Chloroethane	50.0000	51.9755	104		5		0-40	60-135
Trichlorofluoromethane	50.0000	32.4499	65		7		0-40	60-145
1,1-Dichloroethene	50.0000	1956.1752	-1447	*	~~-23~~ 10		0-40	70-130
Acetone	50.0000	217.7481	166	*	16		0-40	40-140
Iodomethane	50.0000	34.1893	68	*	26		0-40	72-121
Carbon disulfide	50.0000	49.7994	93		10		0-40	35-160
Methylene chloride	50.0000	686.7141	178	*	15		0-40	55-140
trans-1,2-Dichloroethene	50.0000	254.8476	-128	*	~~161~~ 20		0-40	60-140
Methyl tert-butyl ether	50.0000	28.0874	56	*	15		0-40	65-125
1,1-Dichloroethane	50.0000	1774.0128	243	*	~~44~~ 4		0-40	70-135
Vinyl acetate	50.0000	48.1514	96		14		0-40	38-163
2-Butanone	50.0000	651.2115	1302	*	51	*	0-40	30-150
cis-1,2-Dichloroethene	50.0000	7766.9851	-4365	*	~~296~~ 29		0-40	70-125
2,2-Dichloropropane	50.0000	7.5732	15	*	29		0-40	70-135
Bromochloromethane	50.0000	44.3778	89		10		0-40	65-130

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

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Instrument ID: V10 Calibration Date: 12/24/2012 Time: 11:15

Lab File ID: V8B7222.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VSTD05010P 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
Dichlorodifluoromethane	0.254	0.198	0.100	-22.1	20.0
Chloromethane	0.186	0.159	0.010	-14.3	20.0
Vinyl chloride	0.204	0.167	0.010	-18.0	20.0
Bromomethane	0.136	0.151	0.010	11.5	20.0
Chloroethane	0.124	0.101	0.010	-18.5	20.0
Trichlorofluoromethane	0.440	0.431	0.010	-2.2	20.0
1,1-Dichloroethene	0.254	0.221	0.100	-13.1	20.0
Acetone	0.022	0.026	0.010	18.1	20.0
Iodomethane	0.299	0.176	0.010	-41.2	20.0
Carbon disulfide	0.748	0.680	0.010	-9.1	20.0
Methylene chloride	0.301	0.247	0.010	-17.9	20.0
trans-1,2-Dichloroethene	0.276	0.259	0.010	-6.2	20.0
Methyl tert-butyl ether	0.847	0.829	0.010	-2.2	20.0
1,1-Dichloroethane	0.455	0.421	0.010	-7.5	20.0
Vinyl acetate	0.627	0.664	0.010	5.9	20.0
2-Butanone	0.028	0.032	0.010	16.1	20.0
cis-1,2-Dichloroethene	0.302	0.283	0.010	-6.2	20.0
2,2-Dichloropropane	0.386	0.486	0.010	25.8	20.0
Bromochloromethane	0.172	0.160	0.010	-6.7	20.0
Chloroform	0.579	0.541	0.010	-6.5	20.0
1,1,1-Trichloroethane	0.538	0.530	0.010	-1.5	20.0
1,1-Dichloropropene	0.148	0.139	0.010	-6.0	20.0
Carbon tetrachloride	0.465	0.482	0.010	3.8	20.0
1,2-Dichloroethane	0.473	0.465	0.010	-1.8	20.0
Benzene	1.015	0.945	0.010	-6.9	20.0
Trichloroethene	0.341	0.326	0.010	-4.5	20.0
1,2-Dichloropropane	0.232	0.218	0.010	-6.1	20.0
Dibromomethane	0.197	0.194	0.010	-1.2	20.0
Bromodichloromethane	0.429	0.427	0.010	-0.5	20.0
cis-1,3-Dichloropropene	0.422	0.432	0.010	2.4	20.0
4-Methyl-2-pentanone	0.177	0.173	0.010	-2.0	20.0
Toluene	1.203	1.138	0.010	-5.4	20.0
trans-1,3-Dichloropropene	0.407	0.433	0.010	6.4	20.0
1,1,2-Trichloroethane	0.262	0.255	0.010	-2.6	20.0
1,3-Dichloropropane	0.469	0.460	0.010	-1.9	20.0
Tetrachloroethene	0.323	0.270	0.010	-16.4	20.0
2-Hexanone	0.140	0.155	0.010	10.8	20.0
Dibromochloromethane	0.419	0.437	0.010	4.2	20.0
1,2-Dibromoethane	0.348	0.345	0.010	-0.8	20.0
Chlorobenzene	0.973	0.953	0.010	-2.1	20.0

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

SW846

7B - FORM VII VOA-2

VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Instrument ID: V10 Calibration Date: 12/24/2012 Time: 11:15

Lab File ID: V8B7222.D Init. Calib. Date(s): 12/18/2012 12/19/2012

EPA Sample No.(VSTD#####) VSTD05010P 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
1,1,1,2-Tetrachloroethane	0.375	0.392	0.010	4.4	20.0
Ethylbenzene	0.494	0.489	0.010	-1.0	20.0
m,p-Xylene	0.593	0.601	0.010	1.3	20.0
o-Xylene	0.587	0.589	0.010	0.3	20.0
Xylene (Total)	0.591	0.597	0.010	1.0	20.0
Styrene	0.954	0.971	0.010	1.9	20.0
Bromoform	0.227	0.245	0.010	7.9	20.0
Isopropylbenzene	1.559	1.577	0.300	1.2	20.0
1,1,2,2-Tetrachloroethane	0.753	0.749	0.300	-0.6	20.0
Bromobenzene	0.785	0.764	0.010	-2.7	20.0
1,2,3-Trichloropropane	0.976	0.999	0.010	2.4	20.0
n-Propylbenzene	0.816	0.820	0.010	0.5	20.0
2-Chlorotoluene	0.780	0.776	0.010	-0.5	20.0
1,3,5-Trimethylbenzene	2.639	2.730	0.010	3.4	20.0
4-Chlorotoluene	0.805	0.798	0.010	-0.9	20.0
tert-Butylbenzene	2.603	2.739	0.010	5.3	20.0
1,2,4-Trimethylbenzene	2.645	2.728	0.010	3.1	20.0
sec-Butylbenzene	3.087	3.172	0.010	2.8	20.0
4-Isopropyltoluene	2.715	2.834	0.010	4.4	20.0
1,3-Dichlorobenzene	1.443	1.434	0.010	-0.6	20.0
1,4-Dichlorobenzene	1.503	1.492	0.010	-0.7	20.0
n-Butylbenzene	2.184	2.360	0.100	8.0	20.0
1,2-Dichlorobenzene	1.407	1.425	0.010	1.3	20.0
1,2-Dibromo-3-chloropropane	0.168	0.182	0.010	8.3	20.0
1,2,4-Trichlorobenzene	0.843	0.870	0.010	3.2	20.0
Hexachlorobutadiene	0.370	0.426	0.010	15.2	20.0
1,2,3-Trichlorobenzene	0.810	0.818	0.010	1.0	20.0
Naphthalene	2.570	2.611	0.010	1.6	20.0

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QA/QC Review of 8270D Semi-Volatiles Data
for Spectrum Analytical, Inc., SDG: SL2625 & SL2626

5 Ground Water Samples and 1 Field Duplicate
Collected December 20, 2012

Prepared by: Donald Anné
January 24, 2013

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8270D.

The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for hexachlorocyclopentadiene was above the allowable maximum (30%) for S6 on 12-18-12. Positive results for hexachlorocyclopentadiene should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8270D.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for nitrobenzene, isophorone, and 4-chloro-3-methylphenol were above the allowable maximum (25%) on 12-24-12 (S6B21411.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: Thee surrogate recoveries were within control limits for soil samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum, but 2 of 128 percent recoveries were below QC limits for aqueous MS/MSD sample MW-5. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recovery for hexachlorobutadiene was above QC limits for aqueous sample LCS-69705. Positive results for hexachlorobutadiene should be considered estimated (J) in associated aqueous samples.

Field Duplicate: The relative percent differences for applicable compounds were below the allowable maximum (20%) for aqueous field duplicate pair MW-5/DUP-1 (attached table), as required.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. SL2626

S1= MW-5 **S2=** DUP-1

Analyte	S1	S2	RPD (%)
phenol	**5.2**	**4.5**	NC
4-methylphenol	**2.5**	**2.5**	NC
naphthalene	10	10	0%
dimethylphthalate	10	10	0%
diethylphthalate	**1.4**	**1.7**	NC
di-n-butylphthalate	**4.0**	**4.4**	NC
butylbenzylphthalate	ND	**1.4**	NC
bis(2-ethylhexyl)phthalate	**1.9**	**2.0**	NC

* RPD is above the allowable maximum (20%)

Results are in units of ug/L.

Bold numbers were values that below the CRQL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69884 LCS Lot No.: A087697

Date Extracted: 12/23/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	42.5178	85		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	42.0982	84		35 - 110
2-Chlorophenol	50.0000	0.0000	42.2882	85		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	43.3445	87		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	42.7491	85		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	43.0440	86		35 - 100
2-Methylphenol	50.0000	0.0000	42.1585	84		40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	40.1335	80		30 - 123
4-Methylphenol	50.0000	0.0000	41.5398	83		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	41.6621	83		35 - 130
Hexachloroethane	50.0000	0.0000	44.9734	90		30 - 95
Nitrobenzene	50.0000	0.0000	49.7800	100		45 - 110
Isophorone	50.0000	0.0000	46.4122	93		50 - 110
2-Nitrophenol	50.0000	0.0000	49.9161	100		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	51.3306	103		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	47.5615	95		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	48.4302	97		35 - 105
Naphthalene	50.0000	0.0000	46.4896	93		40 - 100
4-Chloroaniline	50.0000	0.0000	46.7344	93		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	47.1254	94		45 - 105
Hexachlorobutadiene	50.0000	0.0000	54.3739	109	*	25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	48.5995	97		45 - 110
2-Methylnaphthalene	50.0000	0.0000	47.8715	96		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	57.2759	115		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	48.8796	98		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	46.1445	92		50 - 110
2-Chloronaphthalene	50.0000	0.0000	44.1182	88		50 - 105
2-Nitroaniline	50.0000	0.0000	48.1876	96		50 - 115
Dimethylphthalate	50.0000	0.0000	45.4239	91		25 - 125
Acenaphthylene	50.0000	0.0000	42.0921	84		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	45.9318	92		50 - 115
3-Nitroaniline	50.0000	0.0000	44.3688	89		20 - 125
Acenaphthene	50.0000	0.0000	44.2345	88		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	46.9733	94		15 - 140
4-Nitrophenol	50.0000	0.0000	50.1719	100		0 - 125
Dibenzofuran	50.0000	0.0000	45.3719	91		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	47.9760	96		50 - 120
Diethylphthalate	50.0000	0.0000	46.6562	93		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	47.4522	95		50 - 110
Fluorene	50.0000	0.0000	45.5418	91		50 - 110
4-Nitroaniline	50.0000	0.0000	39.4330	79		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	42.5188	85		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	41.2587	83		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	45.8962	92		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-69884

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Lab Sample ID: LCS-69884 LCS Lot No.: A087697

Date Extracted: 12/23/2012 Date Analyzed (1): 12/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	47.4031	95		50 - 110
Pentachlorophenol	50.0000	0.0000	37.1144	74		40 - 115
Phenanthrene	50.0000	0.0000	42.2089	84		50 - 115
Anthracene	50.0000	0.0000	42.4953	85		55 - 110
Carbazole	50.0000	0.0000	40.2672	81		50 - 115
Di-n-butylphthalate	50.0000	0.0000	42.8442	86		55 - 115
Fluoranthene	50.0000	0.0000	44.2488	88		55 - 115
Pyrene	50.0000	0.0000	44.8640	90		50 - 130
Butylbenzylphthalate	50.0000	0.0000	46.0215	92		45 - 115
3,3'-Dichlorobenzidine	50.0000	0.0000	35.3147	71		20 - 110
Benzo(a)anthracene	50.0000	0.0000	46.6139	93		55 - 110
Chrysene	50.0000	0.0000	46.1025	92		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	45.2491	90		40 - 125
Di-n-octylphthalate	50.0000	0.0000	47.5190	95		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	52.5667	105		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	46.9956	94		45 - 125
Benzo(a)pyrene	50.0000	0.0000	49.5452	99		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	52.0002	104		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	52.3527	105		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	51.5787	103		40 - 125

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

* Values outside of QC limits

Spike Recovery: 1 out of 64 outside limits

COMMENTS:

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Phenol	50.0000	5.1610	13.8209	17		0-115
Bis(2-chloroethyl)ether	50.0000	0.0000	35.0477	70		35-110
2-Chlorophenol	50.0000	0.0000	28.1253	56		35-105
1,3-Dichlorobenzene	50.0000	0.0000	33.3876	67		30-100
1,4-Dichlorobenzene	50.0000	0.0000	33.3628	67		30-100
1,2-Dichlorobenzene	50.0000	0.0000	34.2441	68		35-100
2-Methylphenol	50.0000	0.0000	23.6353	47		40-110
2,2'-oxybis(1-Chloropropan	50.0000	0.0000	30.1988	60		30-123
4-Methylphenol	50.0000	2.4625	21.2506	38		30-110
N-Nitroso-di-n-propylamine	50.0000	0.0000	34.5781	69		35-130
Hexachloroethane	50.0000	0.0000	35.2227	70		30-95
Nitrobenzene	50.0000	0.0000	42.2823	85		45-110
Isophorone	50.0000	0.0000	38.4846	77		50-110
2-Nitrophenol	50.0000	0.0000	37.6765	75		40-115
2,4-Dimethylphenol	50.0000	0.0000	38.6833	77		30-110
2,4-Dichlorophenol	50.0000	0.0000	36.5671	73		50-105
1,2,4-Trichlorobenzene	50.0000	0.0000	38.7454	77		35-105
Naphthalene	50.0000	10.2255	53.1314	86		40-100
4-Chloroaniline	50.0000	0.0000	20.9668	42		15-110
Bis(2-chloroethoxy)methane	50.0000	0.0000	40.3088	81		45-105
Hexachlorobutadiene	50.0000	0.0000	40.2170	80		25-105
4-Chloro-3-methylphenol	50.0000	0.0000	34.2344	68		45-110
2-Methylnaphthalene	50.0000	0.0000	41.2081	82		45-105
Hexachlorocyclopentadiene	50.0000	0.0000	46.4672	93		27-147
2,4,6-Trichlorophenol	50.0000	0.0000	42.8330	86		50-115
2,4,5-Trichlorophenol	50.0000	0.0000	40.2631	81		50-110
2-Chloronaphthalene	50.0000	0.0000	39.7608	80		50-105
2-Nitroaniline	50.0000	0.0000	42.4458	85		50-115
Dimethylphthalate	50.0000	10.3203	51.7973	83		25-125
Acenaphthylene	50.0000	0.0000	38.6300	77		50-105
2,6-Dinitrotoluene	50.0000	0.0000	41.1812	82		50-115
3-Nitroaniline	50.0000	0.0000	23.9307	48		20-125
Acenaphthene	50.0000	0.0000	40.3367	81		45-110
2,4-Dinitrophenol	50.0000	0.0000	42.0518	84		15-140
4-Nitrophenol	50.0000	0.0000	12.8384	26		0-125
Dibenzofuran	50.0000	0.0000	40.0629	80		55-105
2,4-Dinitrotoluene	50.0000	0.0000	39.5025	79		50-120
Diethylphthalate	50.0000	1.3600	42.4285	82		40-120
4-Chlorophenyl-phenylether	50.0000	0.0000	40.9670	82		50-110
Fluorene	50.0000	0.0000	40.2639	81		50-110
4-Nitroaniline	50.0000	0.0000	21.0137	42		35-120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	36.8086	74		40-130
N-Nitrosodiphenylamine	50.0000	0.0000	38.6443	77		50-110
4-Bromophenyl-phenylether	50.0000	0.0000	39.9477	80		50-115

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

Hexachlorobenzene	50.0000	0.0000	39.9322	80		50-110
Pentachlorophenol	50.0000	0.0000	37.8204	76		40-115
Phenanthrene	50.0000	0.0000	37.7606	76		50-115
Anthracene	50.0000	0.0000	37.9599	76		55-110
Carbazole	50.0000	0.0000	36.8942	74		50-115
Di-n-butylphthalate	50.0000	3.9935	41.7608	76		55-115
Fluoranthene	50.0000	0.0000	36.5875	73		55-115
Pyrene	50.0000	0.0000	42.0277	84		50-130
Butylbenzylphthalate	50.0000	0.0000	42.0329	84		45-115
3,3´-Dichlorobenzidine	50.0000	0.0000	2.2396	4	*	20-110
Benzo(a)anthracene	50.0000	0.0000	39.1757	78		55-110
Chrysene	50.0000	0.0000	39.0348	78		55-110
Bis(2-ethylhexyl)phthalate	50.0000	1.9453	40.8146	78		40-125
Di-n-octylphthalate	50.0000	0.0000	44.6522	89		35-135
Benzo(b)fluoranthene	50.0000	0.0000	46.8444	94		45-120
Benzo(k)fluoranthene	50.0000	0.0000	42.6568	85		45-125
Benzo(a)pyrene	50.0000	0.0000	41.9660	84		55-110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	42.3066	85		45-125
Dibenzo(a,h)anthracene	50.0000	0.0000	42.5153	85		40-125
Benzo(g,h,i)perylene	50.0000	0.0000	41.7379	83		40-125

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	15.2875	20		16		0-40	0-115
Bis(2-chloroethyl)ether	50.0000	36.8128	74		5		0-40	35-110
2-Chlorophenol	50.0000	29.3625	59		4		0-40	35-105
1,3-Dichlorobenzene	50.0000	32.8560	66		2		0-40	30-100
1,4-Dichlorobenzene	50.0000	33.6915	67		1		0-40	30-100
1,2-Dichlorobenzene	50.0000	34.0099	68		1		0-40	35-100
2-Methylphenol	50.0000	24.9963	50		6		0-40	40-110
2,2´-oxybis(1-Chloropropan	50.0000	32.0883	64		6		0-40	30-123
4-Methylphenol	50.0000	23.3366	42		11		0-40	30-110
N-Nitroso-di-n-propylamine	50.0000	35.6498	71		3		0-40	35-130
Hexachloroethane	50.0000	35.0221	70		1		0-40	30-95
Nitrobenzene	50.0000	41.1769	82		3		0-40	45-110
Isophorone	50.0000	38.9009	78		1		0-40	50-110
2-Nitrophenol	50.0000	40.0213	80		6		0-40	40-115
2,4-Dimethylphenol	50.0000	37.9495	76		2		0-40	30-110
2,4-Dichlorophenol	50.0000	37.3165	75		2		0-40	50-105
1,2,4-Trichlorobenzene	50.0000	37.3115	75		4		0-40	35-105
Naphthalene	50.0000	45.7775	71		19		0-40	40-100
4-Chloroaniline	50.0000	23.0152	46		9		0-40	15-110
Bis(2-chloroethoxy)methane	50.0000	40.1561	80		0		0-40	45-105
Hexachlorobutadiene	50.0000	39.5620	79		2		0-40	25-105
4-Chloro-3-methylphenol	50.0000	35.1962	70		3		0-40	45-110
2-Methylnaphthalene	50.0000	39.9333	80		3		0-40	45-105

3C - FORM III SV-1

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2626 Mod. Ref No.: SDG No.: SL2626

Matrix Spike - EPA Sample No.: MW-5

Hexachlorocyclopentadiene	50.0000	40.1279	80		15		0-40	27-147
2,4,6-Trichlorophenol	50.0000	43.4808	87		2		0-40	50-115
2,4,5-Trichlorophenol	50.0000	41.3374	83		3		0-40	50-110
2-Chloronaphthalene	50.0000	39.9612	80		1		0-40	50-105
2-Nitroaniline	50.0000	40.7420	81		4		0-40	50-115
Dimethylphthalate	50.0000	52.9270	85		3		0-40	25-125
Acenaphthylene	50.0000	37.4468	75		3		0-40	50-105
2,6-Dinitrotoluene	50.0000	41.1662	82		0		0-40	50-115
3-Nitroaniline	50.0000	24.3475	49		2		0-40	20-125
Acenaphthene	50.0000	40.1479	80		0		0-40	45-110
2,4-Dinitrophenol	50.0000	42.5672	85		1		0-40	15-140
4-Nitrophenol	50.0000	16.4552	33		25		0-40	0-125
Dibenzofuran	50.0000	40.1571	80		0		0-40	55-105
2,4-Dinitrotoluene	50.0000	40.5648	81		3		0-40	50-120
Diethylphthalate	50.0000	42.2691	82		0		0-40	40-120
4-Chlorophenyl-phenylether	50.0000	40.9546	82		0		0-40	50-110
Fluorene	50.0000	40.1496	80		0		0-40	50-110
4-Nitroaniline	50.0000	19.9742	40		5		0-40	35-120
4,6-Dinitro-2-methylphenol	50.0000	37.3568	75		1		0-40	40-130
N-Nitrosodiphenylamine	50.0000	38.2131	76		1		0-40	50-110
4-Bromophenyl-phenylether	50.0000	41.2199	82		3		0-40	50-115
Hexachlorobenzene	50.0000	41.3874	83		4		0-40	50-110
Pentachlorophenol	50.0000	40.4465	81		7		0-40	40-115
Phenanthrene	50.0000	38.9732	78		3		0-40	50-115
Anthracene	50.0000	37.8374	76		0		0-40	55-110
Carbazole	50.0000	37.7548	76		2		0-40	50-115
Di-n-butylphthalate	50.0000	42.1924	76		1		0-40	55-115
Fluoranthene	50.0000	37.4743	75		2		0-40	55-115
Pyrene	50.0000	43.9103	88		4		0-40	50-130
Butylbenzylphthalate	50.0000	44.1119	88		5		0-40	45-115
3,3'-Dichlorobenzidine	50.0000	2.1635	4	*	3		0-40	20-110
Benzo(a)anthracene	50.0000	41.2131	82		5		0-40	55-110
Chrysene	50.0000	41.8655	84		7		0-40	55-110
Bis(2-ethylhexyl)phthalate	50.0000	43.0981	82		6		0-40	40-125
Di-n-octylphthalate	50.0000	45.7956	92		3		0-40	35-135
Benzo(b)fluoranthene	50.0000	44.5333	89		5		0-40	45-120
Benzo(k)fluoranthene	50.0000	46.2781	93		8		0-40	45-125
Benzo(a)pyrene	50.0000	42.9113	86		2		0-40	55-110
Indeno(1,2,3-cd)pyrene	50.0000	43.1101	86		2		0-40	45-125
Dibenzo(a,h)anthracene	50.0000	43.7296	87		3		0-40	40-125
Benzo(g,h,i)perylene	50.0000	42.4303	85		2		0-40	40-125

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

* Values outside of QC limits

RPD: 0 out of 64 outside limits

6 - FORM VI SV-2

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: L2626 SAS No.: SDG No.: SL2626

Instrument ID: S6 Calibration Date(s): 12/18/2012 12/18/2012

Calibration Times: 11:08 14:00

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

LAB FILE ID: RRFD00 = S6B1986A.D RRFD01 = S6B1984.D RRFD02 = S6B1981.D RRFD04 = S6B1985.D RRFD06 = S6B1986.D
RRFD08 = S6B1983.D

COMPOUND	RRFD00	RRFD01	RRFD02	RRFD04	RRFD06	RRFD08					$\overline{RRF}$	% RSD
Phenol	1.597	1.642	1.819	1.450	1.592	1.433					1.589	8.9
Bis(2-chloroethyl)ether	0.716	0.732	0.891	0.633	0.715	0.660					0.724	12.4
2-Chlorophenol	1.238	1.278	1.332	1.159	1.277	1.125					1.235	6.4
1,3-Dichlorobenzene	1.520	1.487	1.492	1.346	1.471	1.285					1.433	6.6
1,4-Dichlorobenzene	1.582	1.540	1.568	1.385	1.481	1.307					1.477	7.5
1,2-Dichlorobenzene	1.459	1.455	1.436	1.307	1.428	1.252					1.389	6.3
2-Methylphenol	1.278	1.270	1.276	1.012	1.152	1.060					1.174	10.1
2,2´-oxybis(1-Chloropropane)	1.054	1.067	1.304	0.951	1.064	0.972					1.069	11.7
4-Methylphenol	1.294	1.283	1.449	1.186	1.247	1.144					1.267	8.4
N-Nitroso-di-n-propylamine	0.899	0.869	1.096	0.802	0.867	0.801					0.889	12.2
Hexachloroethane	0.548	0.513	0.585	0.487	0.545	0.471					0.525	8.1
Nitrobenzene	0.385	0.385	0.442	0.317	0.330	0.285					0.357	16.0
Isophorone	0.682	0.667	0.762	0.578	0.577	0.499					0.628	14.9
2-Nitrophenol	0.197	0.202	0.203	0.170	0.177	0.150					0.183	11.6
2,4-Dimethylphenol	0.363	0.369	0.287	0.214	0.314	0.267					0.302	19.5
2,4-Dichlorophenol	0.339	0.328	0.338	0.291	0.302	0.251					0.308	11.1
1,2,4-Trichlorobenzene	0.400	0.388	0.367	0.327	0.342	0.283					0.351	12.3
Naphthalene	1.044	1.053	1.068	0.887	0.907	0.756					0.953	13.0
4-Chloroaniline	0.455	0.438	0.473	0.383	0.383	0.304					0.406	15.3
Bis(2-chloroethoxy)methane	0.373	0.378	0.399	0.311	0.323	0.275					0.343	13.8
Hexachlorobutadiene	0.207	0.216	0.192	0.177	0.184	0.152					0.188	12.1
4-Chloro-3-methylphenol	0.345	0.342	0.392	0.304	0.303	0.267					0.326	13.3
2-Methylnaphthalene	0.818	0.788	0.820	0.668	0.692	0.579					0.728	13.4
Hexachlorocyclopentadiene	0.293	0.302	0.223	0.163	0.286	0.102					0.228	35.7
2,4,6-Trichlorophenol	0.364	0.391	0.378	0.330	0.395	0.327					0.364	8.2
2,4,5-Trichlorophenol		0.405	0.382	0.374	0.407	0.346					0.383	6.5
2-Chloronaphthalene	1.193	1.190	1.143	0.982	1.149	0.972					1.105	9.2

6 - FORM VI SV-3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Spectrum Analytical, Inc. Contract:

Lab Code: MITKEM Case No.: L2626 SAS No.: SDG No.: SL2626

Instrument ID: S6 Calibration Date(s): 12/18/2012 12/18/2012

Calibration Times: 11:08 14:00

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

LAB FILE ID: RRFD00 = S6B1986A.D RRFD01 = S6B1984.D RRFD02 = S6B1981.D RRFD04 = S6B1985.D RRFD06 = S6B1986.D
RRFD08 = S6B1983.D

COMPOUND	RRFD00	RRFD01	RRFD02	RRFD04	RRFD06	RRFD08					RRF	% RSD
2-Nitroaniline		0.315	0.366	0.267	0.310	0.270					0.306	13.2
Dimethylphthalate	1.429	1.403	1.417	1.185	1.373	1.164					1.328	9.1
Acenaphthylene	1.968	1.938	1.908	1.616	1.876	1.573					1.813	9.5
2,6-Dinitrotoluene	0.314	0.336	0.332	0.286	0.333	0.285					0.314	7.5
3-Nitroaniline		0.354	0.368	0.296	0.341	0.292					0.330	10.4
Acenaphthene	1.219	1.219	1.193	1.033	1.194	1.000					1.143	8.7
2,4-Dinitrophenol		0.135	0.174	0.176	0.232	0.198					0.183	19.5
4-Nitrophenol		0.194	0.252	0.187	0.219	0.195					0.209	12.8
Dibenzofuran	1.776	1.791	1.767	1.510	1.743	1.464					1.675	8.8
2,4-Dinitrotoluene	0.442	0.444	0.461	0.402	0.441	0.386					0.429	6.7
Diethylphthalate	1.401	1.441	1.456	1.235	1.426	1.215					1.362	7.9
4-Chlorophenyl-phenylether	0.776	0.738	0.709	0.630	0.734	0.615					0.701	9.2
Fluorene	1.517	1.515	1.459	1.274	1.493	1.262					1.420	8.4
4-Nitroaniline		0.371	0.400	0.327	0.365	0.310					0.355	10.1
4,6-Dinitro-2-methylphenol		0.120	0.138	0.123	0.149	0.124					0.131	9.5
N-Nitrosodiphenylamine	0.648	0.648	0.619	0.538	0.644	0.520					0.603	9.7
4-Bromophenyl-phenylether	0.217	0.217	0.204	0.178	0.215	0.177					0.201	9.5
Hexachlorobenzene	0.231	0.239	0.225	0.196	0.233	0.190					0.219	9.4
Pentachlorophenol		0.110	0.126	0.104	0.146	0.127					0.123	13.4
Phenanthrene	1.123	1.094	1.087	0.922	1.094	0.903					1.037	9.4
Anthracene	1.110	1.127	1.130	0.920	1.133	0.926					1.058	9.9
Carbazole	1.084	1.068	1.090	0.893	1.034	0.838					1.001	10.8
Di-n-butylphthalate	1.259	1.273	1.280	1.068	1.294	1.067					1.207	9.0
Fluoranthene	1.292	1.273	1.307	1.103	1.305	1.073					1.226	8.8
Pyrene	1.149	1.146	1.068	0.917	1.131	0.906					1.053	10.8
Butylbenzylphthalate	0.518	0.525	0.491	0.428	0.521	0.425					0.485	9.6
3,3´-Dichlorobenzidine	0.451	0.443	0.421	0.353	0.413	0.328					0.401	12.4

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.: L2626 SAS No.: SDG No.: SL2626

Instrument ID: S6 Calibration Date(s): 12/18/2012 12/18/2012

Calibration Times: 11:08 14:00

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

LAB FILE ID: RRFD00 = S6B1986A.D RRFD01 = S6B1984.D RRFD02 = S6B1981.D RRFD04 = S6B1985.D RRFD06 = S6B1986.D
RRFD08 = S6B1983.D

COMPOUND	RRFD00	RRFD01	RRFD02	RRFD04	RRFD06	RRFD08					$\overline{RRF}$	% RSD
Benzo(a)anthracene	1.218	1.210	1.136	0.934	1.163	0.930					1.099	12.1
Chrysene	1.103	1.057	1.033	0.868	1.061	0.852					0.996	10.8
Bis(2-ethylhexyl)phthalate	0.764	0.763	0.722	0.627	0.785	0.629					0.715	9.8
Di-n-octylphthalate	1.524	1.545	1.230	1.171	1.346	1.176					1.332	12.7
Benzo(b)fluoranthene	1.415	1.398	1.161	1.067	1.274	1.086					1.233	12.4
Benzo(k)fluoranthene	1.416	1.398	1.194	1.111	1.183	1.075					1.229	11.7
Benzo(a)pyrene	1.307	1.289	1.115	1.014	1.135	1.000					1.143	11.4
Indeno(1,2,3-cd)pyrene	1.497	1.469	1.402	1.236	1.359	1.199					1.360	8.9
Dibenzo(a,h)anthracene	1.219	1.232	1.193	1.046	1.140	1.010					1.140	8.2
Benzo(g,h,i)perylene	1.257	1.222	1.173	1.029	1.112	0.983					1.129	9.6

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

SW846

7E - FORM VII SV-1

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Instrument ID: S6 Calibration Date: 12/24/2012 Time: 11:59

Lab File ID: S6B2141.D Init. Calib. Date(s): 12/18/2012 12/18/2012

EPA Sample No.(SSTD020##) SSTD0256H Init. Calib. Time(s): 11:08 14:00

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Phenol	1.589	1.720	0.010	8.3	20.0
Bis(2-chloroethyl)ether	0.724	0.898	0.010	24.0	20.0
2-Chlorophenol	1.235	1.260	0.010	2.1	20.0
1,3-Dichlorobenzene	1.433	1.444	0.010	0.8	20.0
1,4-Dichlorobenzene	1.477	1.532	0.010	3.7	20.0
1,2-Dichlorobenzene	1.389	1.455	0.010	4.7	20.0
2-Methylphenol	1.174	1.252	0.010	6.6	20.0
2,2'-oxybis(1-Chloropropane)	1.069	1.206	0.010	12.9	20.0
4-Methylphenol	1.267	1.358	0.010	7.1	20.0
N-Nitroso-di-n-propylamine	0.889	1.069	0.050	20.2	20.0
Hexachloroethane	0.525	0.603	0.010	14.8	20.0
Nitrobenzene	0.357	0.459	0.010	28.4	20.0
Isophorone	0.628	0.802	0.010	27.9	20.0
2-Nitrophenol	0.183	0.209	0.010	13.9	20.0
2,4-Dimethylphenol	0.302	0.297	0.010	-1.9	20.0
2,4-Dichlorophenol	0.308	0.338	0.010	9.8	20.0
1,2,4-Trichlorobenzene	0.351	0.396	0.010	12.7	20.0
Naphthalene	0.953	1.082	0.010	13.6	20.0
4-Chloroaniline	0.406	0.445	0.010	9.5	20.0
Bis(2-chloroethoxy)methane	0.343	0.411	0.010	20.0	20.0
Hexachlorobutadiene	0.188	0.224	0.010	19.2	20.0
4-Chloro-3-methylphenol	0.326	0.412	0.010	26.4	20.0
2-Methylnaphthalene	0.728	0.818	0.010	12.4	20.0
Hexachlorocyclopentadiene	0.228	0.195	0.050	-14.5	20.0
2,4,6-Trichlorophenol	0.364	0.378	0.010	3.9	20.0
2,4,5-Trichlorophenol	0.383	0.396	0.010	3.4	20.0
2-Chloronaphthalene	1.105	1.097	0.010	-0.7	20.0
2-Nitroaniline	0.306	0.371	0.010	21.3	20.0
Dimethylphthalate	1.328	1.424	0.010	7.2	20.0
Acenaphthylene	1.813	1.829	0.010	0.9	20.0
2,6-Dinitrotoluene	0.314	0.332	0.010	5.7	20.0
3-Nitroaniline	0.330	0.332	0.010	0.3	20.0
Acenaphthene	1.143	1.160	0.010	1.5	20.0
2,4-Dinitrophenol	0.183	0.169	0.050	-7.4	20.0
4-Nitrophenol	0.209	0.253	0.050	20.7	20.0
Dibenzofuran	1.675	1.722	0.010	2.8	20.0
2,4-Dinitrotoluene	0.429	0.461	0.010	7.5	20.0
Diethylphthalate	1.362	1.506	0.010	10.5	20.0
4-Chlorophenyl-phenylether	0.701	0.745	0.010	6.4	20.0
Fluorene	1.420	1.490	0.010	4.9	20.0
4-Nitroaniline	0.355	0.357	0.010	0.7	20.0
4,6-Dinitro-2-methylphenol	0.131	0.129	0.010	-1.7	20.0

7F - FORM VII SV-2

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Instrument ID: S6 Calibration Date: 12/24/2012 Time: 11:59

Lab File ID: S6B2141.D Init. Calib. Date(s): 12/18/2012 12/18/2012

EPA Sample No.(SSTD020##) SSTD0256H Init. Calib. Time(s): 11:08 14:00

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
N-Nitrosodiphenylamine	0.603	0.607	0.010	0.7	20.0
4-Bromophenyl-phenylether	0.201	0.233	0.010	15.5	20.0
Hexachlorobenzene	0.219	0.256	0.010	17.2	20.0
Pentachlorophenol	0.123	0.095	0.010	-22.5	20.0
Phenanthrene	1.037	1.077	0.010	3.8	20.0
Anthracene	1.058	1.106	0.010	4.6	20.0
Carbazole	1.001	1.017	0.010	1.6	20.0
Di-n-butylphthalate	1.207	1.293	0.010	7.1	20.0
Fluoranthene	1.226	1.301	0.010	6.2	20.0
Pyrene	1.053	1.048	0.010	-0.5	20.0
Butylbenzylphthalate	0.485	0.493	0.010	1.8	20.0
3,3'-Dichlorobenzidine	0.401	0.430	0.010	7.0	20.0
Benzo(a)anthracene	1.099	1.098	0.010	-0.1	20.0
Chrysene	0.996	0.991	0.010	-0.5	20.0
Bis(2-ethylhexyl)phthalate	0.715	0.725	0.010	1.4	20.0
Di-n-octylphthalate	1.332	1.291	0.010	-3.1	20.0
Benzo(b)fluoranthene	1.233	1.196	0.010	-3.0	20.0
Benzo(k)fluoranthene	1.229	1.255	0.010	2.1	20.0
Benzo(a)pyrene	1.143	1.135	0.010	-0.8	20.0
Indeno(1,2,3-cd)pyrene	1.360	1.398	0.010	2.8	20.0
Dibenzo(a,h)anthracene	1.140	1.165	0.010	2.2	20.0
Benzo(g,h,i)perylene	1.129	1.150	0.010	1.9	20.0

7G - FORM VII SV-3

SEMIVOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L2625 Mod. Ref No.: SDG No.: SL2625

Instrument ID: S6 Calibration Date: 12/24/2012 Time: 11:59

Lab File ID: S6B2141.D Init. Calib. Date(s): 12/18/2012 12/18/2012

EPA Sample No.(SSTD020##) SSTD0256H Init. Calib. Time(s): 11:08 14:00

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

COMPOUND	RRF	RRF025	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.366	0.469	0.010	28.2	20.0
2-Fluorobiphenyl	1.331	1.369	0.010	2.9	20.0
Terphenyl-d14	0.738	0.769	0.010	4.2	20.0
Phenol-d5	1.452	1.598	0.010	10.0	20.0
2-Fluorophenol	1.124	1.197	0.010	6.5	20.0
2,4,6-Tribromophenol	0.097	0.116	0.010	19.4	20.0

ALPHA GEOSCIENCE
Geology
Hydrology
Remediation
Water Supply

QA/QC Review of TAL Metals Data for
Spectrum Analytical, Inc., SDG: SL2625 & SL2626

5 Ground Water Samples and 1 Field Duplicate
Collected December 20, 2012

Prepared by: Donald Anné
January 24, 2013

Holding Times: Samples were analyzed within the USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for TAL metals were within control limits (90-110% all metals except Hg, 80-120% for Hg).

Blanks: The analyses for initial and continuing calibration, and preparation blanks reported target metals as below the CRDLs, as required.

ICP Interference Check Sample: The percent recoveries for target metals were within control limits (80-120%).

Spike Sample Recovery: The percent recovery for antimony was below control limits, but was not below 30% for aqueous spike sample MW-5S. Positive and "not detected" results for antimony should be considered estimated (J) in associated aqueous samples.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (20%) for aqueous duplicate sample MW-5D, as requireed.

Field Duplicate: The relative percent differences for aluminum, barium, and iron were above the allowable maximum (20%) for aqueous field duplicate pair MW-5/DUP-1 (attached table). Results for these metals should be considered estimated (J) in samples MW-5 and DUP-1.

Laboratory Control Sample: The percent recoveries for TAL metals were within control limits (80-120%) for aqueous samples LCS-69903 and LCS-69905.

ICP Serial Dilution: The %Ds for applicable TAL metals were below the allowable maximum (10%) for aqueous serial dilution sample MW-5, as required.

Instrument Detection Limits: The IDLs were at or below CRDLs, as required.

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TAL Metals

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. SL2626

S1= MW-5 **S2=** DUP-1

Analyte	S1	S2	RPD (%)	
aluminum	9890	3230	102%	*
antimony	**11.0**	**14.8**	NC	
arsenic	**9.1**	ND	NC	
barium	1680	971	53%	*
beryllium	**0.50**	ND	NC	
cadmium	**1.7**	**1.3**	NC	
calcium	131000	122000	7%	
chromium	**18.6**	**6.5**	NC	
cobalt	**12.7**	**6.5**	NC	
copper	67.8	**29.2**	NC	
iron	19800	6420	102%	*
lead	31.8	**9.7**	NC	
magnesium	57200	52100	9%	
manganese	3540	3560	1%	
mercury	ND	ND	NC	
nickel	**31.0**	**15.4**	NC	
potassium	32600	31600	3%	
selenium	ND	**15.2**	NC	
silver	ND	ND	NC	
sodium	68300	66200	3%	
thallium	ND	ND	NC	
vanadium	**18.2**	**6.4**	NC	
zinc	84.5	**33.8**	NC	

* RPD is above the allowable maximum (20%)

All results are in units of ug/L.

Bold numbers were values that below the CRDL.
ND - Not detected.

NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Laboratory Duplicate

Calculations for Laboratory Duplicate Relative Percent Difference (RPD)

SDG No. SL2626

S1= MW-5 **S2=** MW-5D

Analyte	S1	S2	RPD (%)
aluminum	9890	9400	5.1%
antimony	**11.0**	**9.0**	NC
arsenic	**9.1**	**4.5**	NC
barium	1680	1584	5.9%
beryllium	**0.50**	**0.51**	NC
cadmium	**1.7**	**1.6**	NC
calcium	131000	122950	6.3%
chromium	**18.6**	**17.7**	NC
cobalt	**12.7**	**12.2**	NC
copper	67.8	64.2	5.5%
iron	19800	18649	6.0%
lead	31.8	28.4	11.3%
magnesium	57200	53826	6.1%
manganese	3540	3332	6.1%
mercury	ND	ND	NC
nickel	**31.0**	**30.0**	NC
potassium	32600	31611	3.1%
selenium	ND	ND	NC
silver	ND	ND	NC
sodium	68300	65956	3.5%
thallium	ND	ND	NC
vanadium	**18.2**	**17.1**	NC
zinc	84.5	79.7	5.8%

* RPD is above the allowable maximum (20%)

All results are in units of ug/L.

Bold numbers were values that below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MW-5S

Lab Name: Spectrum Analytical, Inc. Contract: 2011-31

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL2626

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
Aluminum	75-125	18300		9890		9100	92		P
Antimony	75-125	349		11.0	B	456	74	N	P
Arsenic	75-125	473		9.1	B	456	102		P
Barium	75-125	10500		1680		9100	97		P
Beryllium	75-125	226		0.50	B	227	100		P
Cadmium	75-125	220		1.7	B	227	96		P
Chromium	75-125	871		18.6	B	910	94		P
Cobalt	75-125	2160		12.7	B	2270	95		P
Copper	75-125	1170		67.8		1130	98		P
Iron		22200		19800		4550	53		P
Lead	75-125	468		31.8		455	96		P
Manganese	75-125	5410		3540		2270	82		P
Nickel	75-125	2170		31.0	B	2270	94		P
Selenium	75-125	464		12.0	U	455	102		P
Silver	75-125	1100		6.9	U	1130	97		P
Thallium	75-125	400		6.2	U	455	88		P
Vanadium	75-125	2180		18.2	B	2270	95		P
Zinc	75-125	2230		84.5		2270	95		P
Mercury	75-125	4.1		0.028	U	4.6	91		CV

Comments: