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www.impactenvironmental.com

January 20, 2010

Mr. Scott Milich
Tor Valley, Inc.
3 Bell Aire Terrace
New City, New York 10956

Re: 256 S Little Tor Road New City, New York

Dear Mr. Scott Milich:

This letter serves as a revised report for the 2nd mobilization of the Phase II Remedial Investigation (RI) conducted at the abovementioned Site.

1. Investigation Plan

This 2nd mobilization of Phase II RI is the continuation of the previous investigations which are best summarized in the Vapor Intrusion Investigation Report, dated April 17, 2009.

Review of the investigation results from the 1st mobilization of the Phase II RI revealed the presence of PCE and its breakdown components in the vicinity of northwestern corner of the building. Specifically, laboratory analysis performed on the soil gas sample SGG-4 (north of the existing building) detected PCE concentration at 186 $\mu\text{g}/\text{m}^3$. Laboratory analysis performed on the soil gas samples SGG-1 and SGG-2 (west of the existing building) detected VC concentrations at 552 $\mu\text{g}/\text{m}^3$ and 133 $\mu\text{g}/\text{m}^3$, respectively. Laboratory analysis on the sub-slab vapor sample SG-4 failed to detect concentration of PCE or its breakdown components, indicating that there is likely no on-going source underneath this portion of the building.

Based on the results of the 1st mobilization of the Phase II RI, a 2nd mobilization of the Phase II RI was performed by Impact Environmental and supervised by the NYSDEC on the Site. The 2nd mobilization including the following activities:

1. Soil borings, identified as SP-2 and SP-3, were installed in the vicinity of SGG-4. PID screening was performed on the soil samples secured from the soil borings. The soil samples that exhibited the highest PID reading were submitted for laboratory analysis for volatile organic compounds. One 1-inch groundwater well, identified as MW-14, was installed in the vicinity of SGG-4.
2. One soil boring, identified as SP-1, was installed in the immediate vicinity of MW-5 from grade to the soil-groundwater interface. PID screening was performed on the soil samples secured from the soil boring. The soil sample that exhibited the highest PID reading was submitted for laboratory analysis for volatile organic compounds. In addition, one saturated soil sample was collected and analyzed for volatile organic compounds and geochemical analytes.
3. Groundwater samples were collected from MW-4, MW-5, MW-7, MW-8 and MW-14. Groundwater samples were analyzed for volatile organic compounds.

The locations of soil borings and groundwater monitoring wells can be referenced with **Plate 1**.

2. Sample Characterization

A visual inspection of all samples recovered during the installation of each of the soil probe was conducted to identify any gross signs of chemical contamination and to classify the sample media. Color classifications were made in accordance with the Munsell Classification System. Gradation classifications were made in accordance with the Unified Soil Classification System.

In general, the subsurface soil were found to consist of brown coarse to fine sand and gravel mixed with little silt and clay from grade to approximately 14 feet BEG. Rock fragment was encountered at all three locations. No evidence of DNAPL was encountered at any locations.

The groundwater was encountered approximately 5 ft below grade. At soil probe SP-1, the highest PID reading (9.2 ppm) was detected at 2'-3' BEG within unsaturated soil. No odor or staining was noted. At soil probe SP-2, the highest PID reading (13.9 ppm) was detected at 10'-12' BEG within saturated soil right above rock fragment. No odor or staining was noted. At soil probe SP-3, the highest PID reading (>100 ppm) was detected at 2' BEG within a layer of coarse to medium sand

mixed with wood debris. The high PID reading was mainly from the wood debris. The surrounding soil gave PID reading of 8.0 ppm. Odor was noted at 0'-2' BEG. The soil probe logs presented in **Appendix A** provide a classification of each sample for color and gradation.

Soil samples SP-1 (3'-4'), SP-2(11'-12') and SP-3 (2'-4') were collected and subjected to ELAP certified laboratory analysis. The laboratory analysis consisted of USEPA Test Method 8260 for total volatile organic analytes. The laboratory analytical results were reported with Analytical Sampling Protocol (ASP) B deliverables. In addition, soil sample SP-1 (6'-7') were collected for geochemical analysis.

3. Groundwater Sampling

On August 12, 2009, Impact Environmental installed one additional groundwater monitoring well, identified as MW-14, at the Site. The placement of the wells is presented on **Plate 1**. The placement of the wells has been selected based on an evaluation of data collected from the Site in consultation with the NYSDEC.

As part of the 2nd mobilization of the Phase II RI, one groundwater sample was acquired from each monitoring well of MW-4, MW-5, MW-7, MW-8 and MW-14. The groundwater samples were subjected to ELAP certified laboratory analysis. The laboratory analysis consisted of USEPA Test Method 8260 for total volatile organic analytes. The laboratory analytical results were reported with Analytical Sampling Protocol (ASP) B deliverables. Additional parameters including temperature, pH, conductivity, salinity and Redox were collected as part of development procedures. The field parameters are present in **Table 1**.

The development and sampling procedures conformed to NYSDEC protocol. A field log protocol was conducted to record sampling data including; date, time, location, sample identification code, depth to water, total depth of the well, method of well development, and sampling technique. The monitoring wells were developed by purging a minimum of three (3) static well volumes utilizing a peristaltic pump. A static well volume is defined as *Static well volume = height of water column $\times$ (well radius)² $\times$ π $\times$ 7.48* (7.48 is the conversion factor for cubic feet to gallons). Following development, one water sample was acquired from each of the monitoring wells utilizing a dedicated disposable bailer to prevent cross-contamination. All of the samples were transferred with minimal

disturbance into the appropriate vessels. The development wastewater was containerized for subsequent disposal.

It should be noted that manhole covers for MW-4, MW-5, MW-7 and MW-8 were destroyed due to site re-pavement. Accordingly, abovementioned wells were not gauged during this investigation. During the next mobilization, on-site wells will be re-surveyed for calculation of groundwater contour.

4. Laboratory Analysis Results

The laboratory analysis performed on the soil samples failed to detect PCE or its breakdown components. The laboratory analysis of soil samples is present in **Table 2**.

The laboratory analysis performed on the groundwater samples detected concentrations of PCE and its breakdown components in all the wells samples. However, the detected concentrations were significantly lower than the previous investigation. The laboratory analysis of groundwater samples is present in **Table 3**. A summary of the historical groundwater concentrations of PCE related analytes is present in **Table 4**.

5. Evaluation

This investigation revealed that the subsurface soil near the northwestern corner of the building appears laminated with layers of clay and sand (especially at SP-1, in vicinity of MW-5). A 12 ft overburden was observed on top of bed rock. Said overburden consists of well graded sand mixed with gravel and clay. Wood debris was also detected at SP-3. The well graded sand mixed with silt and clay made the soil matrix tight and difficult for dissolved contaminants to flow through. Also, laminated soil mixed with clay is capable of holding pockets of contaminants, which when released (possibly due to water level fluctuation) could result in the PCE spike similar to the one observed in 2007.

This investigation also revealed that PCE levels in groundwater have dropped significantly compared with last sampling event in March 2008. PCE levels drop from 1300 ppb to 90 ppb at MW-5, and from 280 ppb to 82 ppb at MW-4. Meanwhile, levels of vinyl chloride at MW-4 and MW-5 were relatively low, indicating that the enhance bioremediation has probably consumed all electron acceptors, which was introduced by HRC injection in June 2006. Low level of PCE (12 ppb) was also detected in the

newly installed well MW-14. This indicates that the plume is more to the north than previously known.

After reviewing the results of the Phase II RI (both 1st and 2nd mobilization), the following activities are proposed:

1. No significant on-going source was detected in the vicinity of the northwestern corner of the building. This is consistent with the observation of significant drop of PCEs in MW-4 and MW-5 since March 2008. However, the observed groundwater plume appears to be more to the north of the building than previous understood.
2. The observed PCE spike starting in 2007 is likely the result of release of trapped contaminants due to water level fluctuation. This hypothesis is based on the following observations: 1) historically, depth-to-water level at MW-5 has fluctuated from 3.88 ft (12-27-2006) to 5.67 (9-5-2007); 2) laminated subsurface soil mixed with clay (based on soil sampling results) is capable of holding pockets of contaminants; and 4) since the observed spike, the PCE concentration at MW-5 has reduced significantly, suggesting a release incident rather than a continuous source.
3. Impact is of the opinion that additional HRC injection is necessary to address the residual contamination. The 2nd injection should be focused around the northwestern corner of the building. Due to the complexity of the soil matrix in the area, it is recommended that HRC injection be continued into unsaturated zone. A separate HRC injection work plan will be submitted to the NYSDEC following approval of this report.

If you have any questions or comments regarding this matter, please feel free to contact me.

Sincerely,
IMPACT ENVIRONMENTAL



Wenqing Fang
Environmental Engineer

Enclosure

CC: Bernard Franklyn, NYSDEC

Table 1: Field Parameters
8-12-2009

Well Name	Time	Temp	pH	Cond.	Salinity	Redox
MW-4	8:10	24	6.64	1109	0.6	-40
	8:20	22.7	7.05	1293	0.7	-47
MW-5	10:20	25.5	NA	2206	1.1	58
	10:38	23.4	NA	2021	1.1	51
	11:00	23.2	1.92	2207	1.2	44
MW-8	11:30	24.6	2.75	667	0.3	64
	11:45	24.1	2.56	685	0.3	63
	12:00	26.3	2.69	690	0.3	64
MW-7	12:15	24.3	0.59	2127	1.1	-55
	12:25	23.4	1.46	2002	1.1	-90
	12:35	23.1	2.03	1951	1	-103
MW-14	12:55	25.9	2.61	2650	1.4	-92
	1:05	24.3	3.13	2495	1.4	-98

Table 2: Detected Analytes in Soil
(8-12-2009)
New City, New York

Parameter Name	SP-1 (3'-4')	SP-2 (11'-12')	SP-3 (2'-4')	NYSDEC TAGM #4046 Recommended Soil Cleanup Objectives
Unit	ug/kg	ug/kg	ug/kg	ug/kg
1,1,1,2-Tetrachloroethane	U	U	U	NA
1,1,1-Trichloroethane	U	U	U	800
1,1,2,2-Tetrachloroethane	U	U	U	600
1,1,2-Trichloroethane	U	U	U	NA
1,1-Dichloroethane	U	U	U	200
1,1-Dichloroethene	U	U	U	400
1,1-Dichloropropene	U	U	U	NA
1,2,3-Trichlorobenzene	U	U	U	NA
1,2,3-Trichloropropane	U	U	U	400
1,2,4-Trichlorobenzene	U	U	U	3,400
1,2,4-Trimethylbenzene	U	U	U	10,000
1,2-Dibromo-3-Chloropropane	U	U	U	NA
1,2-Dibromoethane	U	U	U	NA
1,2-Dichlorobenzene	U	U	U	7,900
1,2-Dichloroethane	U	U	U	100
1,2-Dichloropropane	U	U	U	NA
1,3,5-Trimethylbenzene	U	U	U	3,300
1,3-Dichlorobenzene	U	U	U	1,600
1,3-Dichloropropane	U	U	U	300
1,4-Dichlorobenzene	U	U	U	8,500
2,2-Dichloropropane	U	U	U	NA
2-Butanone	U	U	U	300
2-Chlorotoluene	U	U	U	NA
2-Hexanone	U	U	U	NA
4-Chlorotoluene	U	U	U	NA
4-Methyl-2-Pentanone	U	U	U	1,000
Acetone	35	U	U	200
Acrolein	U	U	U	NA
Acrylonitrile	U	U	U	NA
Benzene	U	U	U	60
Bromobenzene	U	U	U	NA
Bromochloromethane	U	U	U	NA
Bromodichloromethane	U	U	U	NA
Bromoform	U	U	U	NA

Table 2: Detected Analytes in Soil
(8-12-2009)
New City, New York

Parameter Name	SP-1 (3'-4')	SP-2 (11'-12')	SP-3 (2'-4')	NYSDEC TAGM #4046 Recommended Soil Cleanup Objectives
Unit	ug/kg	ug/kg	ug/kg	ug/kg
Bromomethane	U	U	U	NA
Carbon Disulfide	U	U	U	2,700
Carbon Tetrachloride	U	U	U	600
Chlorobenzene	U	U	U	1,700
Chlorodibromomethane	U	U	U	NA
Chloroethane	U	U	U	1,900
Chloroform	U	U	U	300
Chloromethane	U	U	U	NA
cis-1,2-Dichloroethene	U	U	U	NA
cis-1,3-Dichloropropene	U	U	U	NA
Dibromomethane	U	U	U	NA
Dichlorodifluoromethane	U	U	U	NA
Ethylbenzene	U	U	U	5,500
Isopropylbenzene	U	U	U	2,300
Methylene Chloride	U	U	U	100
Methyl Tert-Butyl Ether	U	U	U	120
Naphthalene	U	U	U	NA
n-Butylbenzene	U	U	U	10,000
n-Propylbenzene	U	U	U	3,700
p-Isopropyltoluene	U	U	U	10,000
sec-Butylbenzene	U	U	U	10,000
Styrene	U	U	U	NA
tert-Butylbenzene	U	U	U	10,000
Tertiary Butyl Alcohol	U	U	U	NA
Tetrachloroethene	U	U	U	1,400
Toluene	U	U	U	1,500
Total Xylenes	U	U	U	1,200
trans-1,2-Dichloroethene	U	U	U	300
trans-1,3-Dichloropropene	U	U	U	NA
Trichloroethene	U	U	U	700
Trichlorofluoromethane	U	U	U	NA
Vinyl Acetate	U	U	U	NA
Vinyl Chloride	U	U	U	200

Table 3: Detected Analytes In Groundwater
(8-12-2009)
New City, New York

Parameter Name	MW-4	MW-5	MW-7	MW-8	MW-14	Field Blank	Trip Blank	NYSDEC TOGS 1.1.1.1. Ambient Water Quality Standards and Guidance Values
Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	U	5
1,1,1-Trichloroethane	U	U	U	U	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U	5
1,1,2-Trichloroethane	U	U	U	U	U	U	U	1
1,1-Dichloroethane	U	U	U	U	U	U	U	5
1,1-Dichloroethene	U	U	U	U	U	U	U	5
1,1-Dichloropropene	U	U	U	U	U	U	U	5
1,2,3-Trichlorobenzene	U	U	U	U	U	U	U	5
1,2,3-Trichloropropane	U	U	U	U	U	U	U	0.04
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U	5
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U	5
1,2-Dibromo-3-Chloropropane	U	U	U	U	U	U	U	0.04
1,2-Dibromoethane	U	U	U	U	U	U	U	0.0006
1,2-Dichlorobenzene	U	U	U	U	U	U	U	3
1,2-Dichloroethane	U	U	U	U	U	U	U	0.6
1,2-Dichloropropane	U	U	U	U	U	U	U	1
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U	5
1,3-Dichlorobenzene	U	U	U	U	U	U	U	3
1,3-Dichloropropane	U	U	U	U	U	U	U	5
1,4-Dichlorobenzene	U	U	U	U	U	U	U	3
2,2-Dichloropropane	U	U	U	U	U	U	U	5
2-Butanone	U	U	U	U	U	U	U	50
2-Chlorotoluene	U	U	U	U	U	U	U	5
2-Hexanone	U	U	U	U	U	U	U	50
4-Chlorotoluene	U	U	U	U	U	U	U	5
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	NA
Acetone	8.1	8	U	6.1	3.2 J	U	U	50
Acrolein	U	U	U	U	U	U	U	NA
Acrylonitrile	U	U	U	U	U	U	U	5
Benzene	U	U	U	U	U	U	U	1
Bromobenzene	U	U	U	U	U	U	U	5
Bromochloromethane	U	U	U	U	U	U	U	5
Bromodichloromethane	U	U	U	U	U	U	U	50
Bromoform	U	U	U	U	U	U	U	50

Table 3: Detected Analytes In Groundwater
(8-12-2009)
New City, New York

Parameter Name	MW-4	MW-5	MW-7	MW-8	MW-14	Field Blank	Trip Blank	NYSDEC TOGS 1.1.1.1. Ambient Water Quality Standards and Guidance Values
Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Bromomethane	U	U	U	U	U	U	U	5
Carbon Disulfide	U	U	U	U	U	U	U	60
Carbon Tetrachloride	U	U	U	U	U	U	U	5
Chlorobenzene	U	U	U	U	U	U	U	5
Chlorodibromomethane	U	U	U	U	U	U	U	50
Chloroethane	U	U	U	U	U	U	U	5
Chloroform	U	U	U	U	U	U	U	7
Chloromethane	U	U	U	U	U	U	U	5
cis-1,2-Dichloroethene	76	3.5	2.2	0.82 J	U	U	U	5
cis-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4
Dibromomethane	U	U	U	U	U	U	U	5
Dichlorodifluoromethane	U	U	U	U	U	U	U	5
Ethylbenzene	U	U	U	U	U	U	U	5
Isopropylbenzene	U	U	U	U	U	U	U	5
Methylene Chloride	U	U	U	U	U	U	U	5
Methyl Tert-Butyl Ether	U	U	3.2	U	U	U	U	10
Naphthalene	U	U	U	U	U	U	U	NA
n-Butylbenzene	U	U	U	U	U	U	U	5
n-Propylbenzene	U	U	U	U	U	U	U	5
p-Isopropyltoluene	U	U	U	U	U	U	U	5
sec-Butylbenzene	U	U	U	U	U	U	U	5
Styrene	U	U	U	U	U	U	U	5
tert-Butylbenzene	U	U	U	U	U	U	U	NA
Tertiary Butyl Alcohol	U	U	U	U	U	U	U	NA
Tetrachloroethene	82	90	2.3	U	12	U	U	5
Toluene	U	U	U	U	U	U	U	5
Total Xylenes	U	U	U	U	U	U	U	5
trans-1,2-Dichloroethene	U	U	U	U	U	U	U	5
trans-1,3-Dichloropropene	U	U	U	U	U	U	U	0.4
Trichloroethene	11	3.5	U	U	U	U	U	5
Trichlorofluoromethane	U	U	U	U	U	U	U	5
Vinyl Acetate	U	U	U	U	U	U	U	NA
Vinyl Chloride	2.2	0.64	U	U	U	U	U	2

Table 4: Historical Groundwater Data

Sample ID	Date	Depth to Water	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Unit		ft	µg/l	µg/l	µg/l	µg/l
NYSDEC Ambient Water Quality Standards & Guidance Values (µg/l)			5	5	5	2
MW-4	4/26/1999	NA	450	210	210	12
	4/6/2005	NA	1400	54	150	4.8
	9/13/2006	3.54	170	49	590	150
	12/27/2006	2.91	180	29	920	39
	3/15/2007	3.12	28	14	85	7
	6/6/2007	3.21	400	64	470	30
	9/5/2007	4.51	620	130	790	44
	1/3/2008	4.5	180	40	280	26
	3/27/2008	NA	280	44	210	73
	8/12/2009	NA	82	11	76	2.2
MW-5	4/26/1999	NA	320	5.3	24	ND
	7/17/2002	NA	78	8	35	ND
	4/6/2005	NA	36	1.5	2.4	ND
	9/13/2006	NA	180	ND	7.5J	ND
	12/27/2006	3.88	200	5.8	4.5	ND
	3/15/2007	4.02	120	4.7	5.2	ND
	6/6/2007	4.21	69	3.1	4.4	ND
	9/5/2007	5.67	2300	10	6.5	ND
	1/3/2008	NA	2000	11	5.2	ND
	3/27/2008	NA	1300	35	25	ND
	8/12/2009	NA	90	3.5	3.5	0.64
MW-7	4/26/1999	NA	29	ND	ND	ND
	4/6/2005	NA	9.2	ND	ND	ND
	9/13/2006	6.89	ND	ND	ND	ND
	12/27/2006	6.27	1.6	ND	2.5	ND
	3/15/2007	6.53	1.8	ND	ND	ND
	6/6/2007	6.58	1	ND	1.4	ND
	9/5/2007	7.93	1	ND	3.1	ND
	1/3/2008	6.65	5.6	ND	2.2	ND
	3/27/2008	NA	2.4	ND	2	ND
	8/12/2009	NA	2.3	ND	2.2	ND
MW-8	4/26/1999	NA	210	8	24	1.4
	7/17/2002	NA	170	5.8	12	ND
	4/6/2005	NA	51	1.1	2.7	ND
	9/13/2006	5.86	27	ND	25	ND
	12/27/2006	5.24	41	1.4	14	1.2
	3/15/2007	5.12	26	1.7	6.4	2.6
	6/6/2007	5.62	9.6	2	27	ND
	9/5/2007	6.91	7.5	4.2	18	5.4
	1/3/2008	8.6	13	5.4	120	21
	3/27/2008	NA	120	38	110	13
	8/12/2009	NA	ND	ND	0.82	ND
MW-12	5/25/1999	NA	24	1.7	2	ND
	7/17/2002	NA	48	1.7	4.1	ND
	4/6/2005	NA	7	ND	.93J	ND
	9/13/2006	NA	.88J	ND	ND	ND
	12/27/2006	6.06	1.3	ND	ND	ND
	3/15/2007	6.02	ND	ND	ND	ND
	6/6/2007	6.26	0.45J	ND	ND	ND
	9/5/2007**	NA	NA	NA	NA	NA
	1/3/2008	5.93	2	ND	1.3	ND
	3/27/2008	NA	ND	ND	ND	ND
MW-14	8/12/2009	NA	12	ND	ND	ND

** well dry, not sample taken



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 www.impactenvironmental.com

Well Code:

MW-14

Installer:

EC

Installation Method:

Geoprobe

Installation Date:

8/12/2009

Geologist:

WF

Coordinates

(State Plane NAD 84):

Elevation:

Site Location:

256 South Little Tor Road Site

Job Number:

04-268

Client:

Tor Valley Inc

Location:

Depth

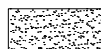
0 ft

WELL COVER

Legend



BENTONITE



SAND PACK



GROUT



NATIVE SOIL

GROUT

BENTONITE

4 ft

SCREEN

WATER TABLE

8 ft

SAND PACK

14 ft

Not To Scale

Surface Pad

Type:

Cement

Well Cap

Type:

Plastic

Surface Casing

Type:

5-inch

Riser Pipe

Type:

Sch. 40 PVC

Diameter:

1 inch

Length:

4 ft

Interval (BEG):

0'-4' BEG

Annular Seal

Type:

backfill drill cutting

Length:

2 ft

Interval (BEG):

0'-2' BEG

Bentonite Seal

Type:

bentonite

Length:

1 ft

Interval (BEG)

2'-3' BEG

Filter Pack

Type:

#2 morris sand

Length:

11 ft

Interval (BEG)

3'-14' BEG

Screen

Type:

Sch. 40 PVC

Diameter

1 inch

Length:

10 ft

Slot Size:

10 slot

Interval (BEG):

4'-14' BEG

ANALYTICAL RESULTS SUMMARY

PROJECT NAME : LITTLE TOR ROAD

**IMPACT ENVIRONMENTAL
170 Keyland Court**

Bohemia , NY - 11716

Phone No: 6312698800

ORDER ID : A3899

ATTENTION : Wen Qing Fang

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FORM S-I

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
FIELDBLANK	A3899-01	8260					
TRIPBLANK	A3899-02	8260					
SP-1(6-7)	A3899-03						9060, Chemtech - SOP, SM5220 D
MW-4	A3899-04	8260					
MW-5	A3899-05	8260					
MW-7	A3899-06	8260					
MW-8	A3899-07	8260					
MW-12	A3899-08	8260					
SP-1(3-4)	A3899-09	8260					Chemtech - SOP
SP-2(11-12)	A3899-10	8260					Chemtech - SOP
SP-3(2-4)	A3899-11	8260					Chemtech - SOP

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

FORM S-IIb

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
A3899-09	SOIL	08/11/09	08/12/09		08/17/09
A3899-10	SOIL	08/11/09	08/12/09		08/17/09
A3899-11	SOIL	08/11/09	08/12/09		08/17/09
A3899-01	WATER	08/11/09	08/12/09		08/13/09
A3899-02	WATER	08/11/09	08/12/09		08/13/09
A3899-04	WATER	08/11/09	08/12/09		08/14/09
A3899-05	WATER	08/11/09	08/12/09		08/14/09
A3899-06	WATER	08/11/09	08/12/09		08/14/09
A3899-07	WATER	08/11/09	08/12/09		08/14/09
A3899-08	WATER	08/11/09	08/12/09		08/14/09

* Details For Test :VOC-Chemtech Full -15

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

FORM S-III

SAMPLE PREPARATION AND ANALYSIS SUMMARY
MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
A3899-01	Water	8260	5030		
A3899-02	Water	8260	5030		
A3899-04	Water	8260	5030		
A3899-05	Water	8260	5030		
A3899-06	Water	8260	5030		
A3899-07	Water	8260	5030		
A3899-08	Water	8260	5030		
A3899-09	Solid	8260	5035		
A3899-10	Solid	8260	5035		
A3899-11	Solid	8260	5035		

Cover Page

Order ID : A3899

Project ID : Little Tor Road

Client : Impact Environmental

Lab Sample Number

A3899-01
A3899-02
A3899-03
A3899-04
A3899-05
A3899-06
A3899-07
A3899-08
A3899-09
A3899-10
A3899-11

Client Sample Number

FIELDBLANK
TRIPBLANK
SP-1(6-7)
MW-4
MW-5
MW-7
MW-8
MW-12
SP-1(3-4)
SP-2(11-12)
SP-3(2-4)

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____



CASE NARRATIVE

Impact Environmental

Project Name: Little Tor Road

Project # N/A

Chemtech Project # A3899

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 8/12/09.

7 Water samples were received on 8/12/09.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: COD, TOC, VOC-Chemtech Full -15, and VOC-Chemtech Full -15. This data package contains results for VOC-Chemtech Full -15.

C. Analytical Techniques:

The analysis performed on instrument MSVOA K were done using GC column RTX-VMS which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #49914. The Trap was supplied by OI Analytical, OI #10 Trap , OI 4560 Concentrator. The analysis performed on instrument MSVOA G were done using GC column RTX-VMS which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #49914. The Trap was supplied by OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator. The method of analysis was 8260.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds except for Bromochloromethane.

The MSD recoveries met the acceptable requirements except for Bromochloromethane.

The RPD recoveries for met criteria except for 2-Hexanone and Tetrachloroethene.

The Blank Spike met requirements for all samples except for 2-Hexanone, Bromochloromethane, 1,1,2,2-Tetrachloroethane and 2-Chloroethylvinyl Ether.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuing Calibration met the requirements except for Dichlorodifluoromethane and 2-Chloroethylvinyl Ether.

The Tuning criteria met requirements.

E. Additional Comments:

Please use %D calculated based on AvgRF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration Curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____



CASE NARRATIVE

Impact Environmental

Project Name: Little Tor Road

Project # N/A

Chemtech Project # A3899

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 8/12/09.

7 Water samples were received on 8/12/09.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: COD, TOC, VOC-Chemtech Full -15, and VOC-Chemtech Full -15. This data package contains results for COD and TOC.

C. Analytical Techniques:

The analysis of COD was based on method SM5220 D and TOC was based on method 9060

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-01

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020727.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/13/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-01Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020727.DLevel: (low/med) Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/13/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-01Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020727.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/13/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-02

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020726.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/13/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-02

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020726.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/13/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-02Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020726.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/13/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-04

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020746.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	2.2	
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	8.1	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	76	
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	11	
78-87-5	1,2-Dichloropropane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-04

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020746.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	82	
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-4

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-04Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020746.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-05

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020747.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	0.64	J
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	8	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	3.5	
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	3.5	
78-87-5	1,2-Dichloropropane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-05

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020747.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	90	
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-5

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-05Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020747.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-06

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020748.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	3.2	
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	2.2	
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-06

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020748.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	2.3	
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-7

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-06Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020748.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-07

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020749.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	6.1	
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	0.82	J
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-07Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020749.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-8

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-07Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020749.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-12

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: A3899-08

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020750.D

Level: (low/med) Date Received: 08/12/09

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	3.2	J
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-12

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-08Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020750.DLevel: (low/med) Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	12	
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-12

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: A3899-08Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020750.DLevel: (low/med) _____ Date Received: 08/12/09% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-1(3-4)

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): SOIL Lab Sample ID: A3899-09

Sample wt/vol: 5.03 (g/mL) g Lab File ID: VK034327.D

Level: (low/med) LOW Date Received: 08/12/09

% Moisture: not dec. 15 Date Analyzed: 08/17/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

75-71-8	Dichlorodifluoromethane	5.8	U
74-87-3	Chloromethane	5.8	U
75-01-4	Vinyl Chloride	5.8	U
74-83-9	Bromomethane	5.8	U
75-00-3	Chloroethane	5.8	U
75-69-4	Trichlorofluoromethane	5.8	U
75-65-0	Tert butyl alcohol	29	U
75-35-4	1,1-Dichloroethene	5.8	U
107-02-8	Acrolein	29	U
107-13-1	Acrylonitrile	29	U
67-64-1	Acetone	35	
75-15-0	Carbon Disulfide	5.8	U
1634-04-4	Methyl tert-butyl Ether	5.8	U
75-09-2	Methylene Chloride	5.8	U
156-60-5	trans-1,2-Dichloroethene	5.8	U
108-05-4	Vinyl Acetate	29	U
75-34-3	1,1-Dichloroethane	5.8	U
78-93-3	2-Butanone	29	U
56-23-5	Carbon Tetrachloride	5.8	U
594-20-7	2,2-Dichloropropane	5.8	U
156-59-2	cis-1,2-Dichloroethene	5.8	U
74-97-5	Bromochloromethane	5.8	U
67-66-3	Chloroform	5.8	U
71-55-6	1,1,1-Trichloroethane	5.8	U
563-58-6	1,1-Dichloropropene	5.8	U
71-43-2	Benzene	5.8	U
107-06-2	1,2-Dichloroethane	5.8	U
79-01-6	Trichloroethene	5.8	U
78-87-5	1,2-Dichloropropane	5.8	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-1(3-4)

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: A3899-09Sample wt/vol: 5.03 (g/mL) g Lab File ID: VK034327.DLevel: (low/med) LOW Date Received: 08/12/09% Moisture: not dec. 15 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

74-95-3	Dibromomethane	5.8	U
75-27-4	Bromodichloromethane	5.8	U
108-10-1	4-Methyl-2-Pentanone	29	U
108-88-3	Toluene	5.8	U
10061-02-6	t-1,3-Dichloropropene	5.8	U
10061-01-5	cis-1,3-Dichloropropene	5.8	U
79-00-5	1,1,2-Trichloroethane	5.8	U
142-28-9	1,3-Dichloropropane	5.8	U
110-75-8	2-Chloroethyl vinyl ether	29	U
591-78-6	2-Hexanone	29	U
124-48-1	Dibromochloromethane	5.8	U
106-93-4	1,2-Dibromoethane	5.8	U
127-18-4	Tetrachloroethene	5.8	U
108-90-7	Chlorobenzene	5.8	U
630-20-6	1,1,1,2-Tetrachloroethane	5.8	U
100-41-4	Ethyl Benzene	5.8	U
179601-23-1	m/p-Xylenes	12	U
95-47-6	o-Xylene	5.8	U
100-42-5	Styrene	5.8	U
75-25-2	Bromoform	5.8	U
98-82-8	Isopropylbenzene	5.8	U
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U
96-18-4	1,2,3-Trichloropropane	5.8	U
108-86-1	Bromobenzene	5.8	U
103-65-1	n-propylbenzene	5.8	U
95-49-8	2-Chlorotoluene	5.8	U
108-67-8	1,3,5-Trimethylbenzene	5.8	U
106-43-4	4-Chlorotoluene	5.8	U
98-06-6	tert-Butylbenzene	5.8	U



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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-1(3-4)

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: A3899-09Sample wt/vol: 5.03 (g/mL) g Lab File ID: VK034327.DLevel: (low/med) LOW Date Received: 08/12/09% Moisture: not dec. 15 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

95-63-6	1,2,4-Trimethylbenzene	5.8	U
135-98-8	sec-Butylbenzene	5.8	U
99-87-6	p-Isopropyltoluene	5.8	U
541-73-1	1,3-Dichlorobenzene	5.8	U
106-46-7	1,4-Dichlorobenzene	5.8	U
104-51-8	n-Butylbenzene	5.8	U
95-50-1	1,2-Dichlorobenzene	5.8	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.8	U
120-82-1	1,2,4-Trichlorobenzene	5.8	U
87-68-3	Hexachlorobutadiene	5.8	U
91-20-3	Naphthalene	5.8	U
87-61-6	1,2,3-Trichlorobenzene	5.8	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-2(11-12)

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): SOIL Lab Sample ID: A3899-10

Sample wt/vol: 5 (g/mL) g Lab File ID: VK034328.D

Level: (low/med) LOW Date Received: 08/12/09

% Moisture: not dec. 8 Date Analyzed: 08/17/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

75-71-8	Dichlorodifluoromethane	5.4	U
74-87-3	Chloromethane	5.4	U
75-01-4	Vinyl Chloride	5.4	U
74-83-9	Bromomethane	5.4	U
75-00-3	Chloroethane	5.4	U
75-69-4	Trichlorofluoromethane	5.4	U
75-65-0	Tert butyl alcohol	27	U
75-35-4	1,1-Dichloroethene	5.4	U
107-02-8	Acrolein	27	U
107-13-1	Acrylonitrile	27	U
67-64-1	Acetone	27	U
75-15-0	Carbon Disulfide	5.4	U
1634-04-4	Methyl tert-butyl Ether	5.4	U
75-09-2	Methylene Chloride	5.4	U
156-60-5	trans-1,2-Dichloroethene	5.4	U
108-05-4	Vinyl Acetate	27	U
75-34-3	1,1-Dichloroethane	5.4	U
78-93-3	2-Butanone	27	U
56-23-5	Carbon Tetrachloride	5.4	U
594-20-7	2,2-Dichloropropane	5.4	U
156-59-2	cis-1,2-Dichloroethene	5.4	U
74-97-5	Bromochloromethane	5.4	U
67-66-3	Chloroform	5.4	U
71-55-6	1,1,1-Trichloroethane	5.4	U
563-58-6	1,1-Dichloropropene	5.4	U
71-43-2	Benzene	5.4	U
107-06-2	1,2-Dichloroethane	5.4	U
79-01-6	Trichloroethene	5.4	U
78-87-5	1,2-Dichloropropane	5.4	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-2(11-12)

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: A3899-10Sample wt/vol: 5 (g/mL) g Lab File ID: VK034328.DLevel: (low/med) LOW Date Received: 08/12/09% Moisture: not dec. 8 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

74-95-3	Dibromomethane	5.4	U
75-27-4	Bromodichloromethane	5.4	U
108-10-1	4-Methyl-2-Pentanone	27	U
108-88-3	Toluene	5.4	U
10061-02-6	t-1,3-Dichloropropene	5.4	U
10061-01-5	cis-1,3-Dichloropropene	5.4	U
79-00-5	1,1,2-Trichloroethane	5.4	U
142-28-9	1,3-Dichloropropane	5.4	U
110-75-8	2-Chloroethyl vinyl ether	27	U
591-78-6	2-Hexanone	27	U
124-48-1	Dibromochloromethane	5.4	U
106-93-4	1,2-Dibromoethane	5.4	U
127-18-4	Tetrachloroethene	5.4	U
108-90-7	Chlorobenzene	5.4	U
630-20-6	1,1,1,2-Tetrachloroethane	5.4	U
100-41-4	Ethyl Benzene	5.4	U
179601-23-1	m/p-Xylenes	11	U
95-47-6	o-Xylene	5.4	U
100-42-5	Styrene	5.4	U
75-25-2	Bromoform	5.4	U
98-82-8	Isopropylbenzene	5.4	U
79-34-5	1,1,2,2-Tetrachloroethane	5.4	U
96-18-4	1,2,3-Trichloropropane	5.4	U
108-86-1	Bromobenzene	5.4	U
103-65-1	n-propylbenzene	5.4	U
95-49-8	2-Chlorotoluene	5.4	U
108-67-8	1,3,5-Trimethylbenzene	5.4	U
106-43-4	4-Chlorotoluene	5.4	U
98-06-6	tert-Butylbenzene	5.4	U



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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-2(11-12)

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: A3899-10Sample wt/vol: 5 (g/mL) g Lab File ID: VK034328.DLevel: (low/med) LOW Date Received: 08/12/09% Moisture: not dec. 8 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

95-63-6	1,2,4-Trimethylbenzene	5.4	U
135-98-8	sec-Butylbenzene	5.4	U
99-87-6	p-Isopropyltoluene	5.4	U
541-73-1	1,3-Dichlorobenzene	5.4	U
106-46-7	1,4-Dichlorobenzene	5.4	U
104-51-8	n-Butylbenzene	5.4	U
95-50-1	1,2-Dichlorobenzene	5.4	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.4	U
120-82-1	1,2,4-Trichlorobenzene	5.4	U
87-68-3	Hexachlorobutadiene	5.4	U
91-20-3	Naphthalene	5.4	U
87-61-6	1,2,3-Trichlorobenzene	5.4	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-3(2-4)

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): SOIL Lab Sample ID: A3899-11

Sample wt/vol: 5.01 (g/mL) g Lab File ID: VK034329.D

Level: (low/med) LOW Date Received: 08/12/09

% Moisture: not dec. 12 Date Analyzed: 08/17/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

75-71-8	Dichlorodifluoromethane	5.7	U
74-87-3	Chloromethane	5.7	U
75-01-4	Vinyl Chloride	5.7	U
74-83-9	Bromomethane	5.7	U
75-00-3	Chloroethane	5.7	U
75-69-4	Trichlorofluoromethane	5.7	U
75-65-0	Tert butyl alcohol	28	U
75-35-4	1,1-Dichloroethene	5.7	U
107-02-8	Acrolein	28	U
107-13-1	Acrylonitrile	28	U
67-64-1	Acetone	28	U
75-15-0	Carbon Disulfide	5.7	U
1634-04-4	Methyl tert-butyl Ether	5.7	U
75-09-2	Methylene Chloride	5.7	U
156-60-5	trans-1,2-Dichloroethene	5.7	U
108-05-4	Vinyl Acetate	28	U
75-34-3	1,1-Dichloroethane	5.7	U
78-93-3	2-Butanone	28	U
56-23-5	Carbon Tetrachloride	5.7	U
594-20-7	2,2-Dichloropropane	5.7	U
156-59-2	cis-1,2-Dichloroethene	5.7	U
74-97-5	Bromochloromethane	5.7	U
67-66-3	Chloroform	5.7	U
71-55-6	1,1,1-Trichloroethane	5.7	U
563-58-6	1,1-Dichloropropene	5.7	U
71-43-2	Benzene	5.7	U
107-06-2	1,2-Dichloroethane	5.7	U
79-01-6	Trichloroethene	5.7	U
78-87-5	1,2-Dichloropropane	5.7	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-3(2-4)

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: A3899-11Sample wt/vol: 5.01 (g/mL) g Lab File ID: VK034329.DLevel: (low/med) LOW Date Received: 08/12/09% Moisture: not dec. 12 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

74-95-3	Dibromomethane	5.7	U
75-27-4	Bromodichloromethane	5.7	U
108-10-1	4-Methyl-2-Pentanone	28	U
108-88-3	Toluene	5.7	U
10061-02-6	t-1,3-Dichloropropene	5.7	U
10061-01-5	cis-1,3-Dichloropropene	5.7	U
79-00-5	1,1,2-Trichloroethane	5.7	U
142-28-9	1,3-Dichloropropane	5.7	U
110-75-8	2-Chloroethyl vinyl ether	28	U
591-78-6	2-Hexanone	28	U
124-48-1	Dibromochloromethane	5.7	U
106-93-4	1,2-Dibromoethane	5.7	U
127-18-4	Tetrachloroethene	5.7	U
108-90-7	Chlorobenzene	5.7	U
630-20-6	1,1,1,2-Tetrachloroethane	5.7	U
100-41-4	Ethyl Benzene	5.7	U
179601-23-1	m/p-Xylenes	11	U
95-47-6	o-Xylene	5.7	U
100-42-5	Styrene	5.7	U
75-25-2	Bromoform	5.7	U
98-82-8	Isopropylbenzene	5.7	U
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U
96-18-4	1,2,3-Trichloropropane	5.7	U
108-86-1	Bromobenzene	5.7	U
103-65-1	n-propylbenzene	5.7	U
95-49-8	2-Chlorotoluene	5.7	U
108-67-8	1,3,5-Trimethylbenzene	5.7	U
106-43-4	4-Chlorotoluene	5.7	U
98-06-6	tert-Butylbenzene	5.7	U



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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP-3(2-4)

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: A3899-11Sample wt/vol: 5.01 (g/mL) g Lab File ID: VK034329.DLevel: (low/med) LOW Date Received: 08/12/09% Moisture: not dec. 12 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

95-63-6	1,2,4-Trimethylbenzene	5.7	U
135-98-8	sec-Butylbenzene	5.7	U
99-87-6	p-Isopropyltoluene	5.7	U
541-73-1	1,3-Dichlorobenzene	5.7	U
106-46-7	1,4-Dichlorobenzene	5.7	U
104-51-8	n-Butylbenzene	5.7	U
95-50-1	1,2-Dichlorobenzene	5.7	U
96-12-8	1,2-Dibromo-3-Chloropropane	5.7	U
120-82-1	1,2,4-Trichlorobenzene	5.7	U
87-68-3	Hexachlorobutadiene	5.7	U
91-20-3	Naphthalene	5.7	U
87-61-6	1,2,3-Trichlorobenzene	5.7	U

Hit Summary Sheet

SW-846

SDG No.: A3899

Client: Impact Environmental

Sample ID	Client ID		Parameter	Concentration	C	RDL	MDL	Units
Client ID:	MW-12							
A3899-08	MW-12	WATER	Acetone	3.20	J	5.0	2.8	ug/L
A3899-08	MW-12	WATER	Tetrachloroethene	12.00		1.0	0.27	ug/L
			Total Voc :		15.20			
			Total Concentration:		15.20			
Client ID:	MW-4							
A3899-04	MW-4	WATER	Vinyl Chloride	2.20		1.0	0.34	ug/L
A3899-04	MW-4	WATER	Acetone	8.10		5.0	2.8	ug/L
A3899-04	MW-4	WATER	cis-1,2-Dichloroethene	76.00		1.0	0.35	ug/L
A3899-04	MW-4	WATER	Trichloroethene	11.00		1.0	0.28	ug/L
A3899-04	MW-4	WATER	Tetrachloroethene	82.00		1.0	0.27	ug/L
			Total Voc :		179.30			
			Total Concentration:		179.30			
Client ID:	MW-5							
A3899-05	MW-5	WATER	Vinyl Chloride	0.64	J	1.0	0.34	ug/L
A3899-05	MW-5	WATER	Acetone	8.00		5.0	2.8	ug/L
A3899-05	MW-5	WATER	cis-1,2-Dichloroethene	3.50		1.0	0.35	ug/L
A3899-05	MW-5	WATER	Trichloroethene	3.50		1.0	0.28	ug/L
A3899-05	MW-5	WATER	Tetrachloroethene	90.00		1.0	0.27	ug/L
			Total Voc :		105.64			
			Total Concentration:		105.64			
Client ID:	MW-7							
A3899-06	MW-7	WATER	Methyl tert-butyl Ether	3.20		1.0	0.35	ug/L
A3899-06	MW-7	WATER	cis-1,2-Dichloroethene	2.20		1.0	0.35	ug/L
A3899-06	MW-7	WATER	Tetrachloroethene	2.30		1.0	0.27	ug/L
			Total Voc :		7.70			
			Total Concentration:		7.70			
Client ID:	MW-8							
A3899-07	MW-8	WATER	Acetone	6.10		5.0	2.8	ug/L
A3899-07	MW-8	WATER	cis-1,2-Dichloroethene	0.82	J	1.0	0.35	ug/L
			Total Voc :		6.92			
			Total Concentration:		6.92			
Client ID:	SP-1(3-4)							
A3899-09	SP-1(3-4)	SOIL	Acetone	35.00		29	3.5	ug/Kg
			Total Voc :		35.00			
			Total Concentration:		35.00			

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CHEMTECH Contract: IMPA01

Lab Code: CHEM CASE No.: A3899 SAS No.: A3899 SDG NO.: A3899

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBG0813W2	91	101	99	99	0
02	BSG0813W1	98	97	99	99	0
03	BSG0813W2	98	101	107	105	0
04	TRIPBLANK	94	101	99	101	0
05	FIELDBLANK	96	104	100	98	0
06	VBG0814W2	98	101	99	103	0
07	BSG0814W1	101	100	102	103	0
08	BSG0814W2	103	101	103	105	0
09	MW-4	104	106	103	104	0
10	MW-5	105	106	102	101	0
11	MW-7	105	106	102	103	0
12	MW-8	109	106	102	108	0
13	MW-12	108	104	101	101	0

QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (80-136)

SMC2 (DBFM) =Dibromofluoromethane (85-121)

SMC3 (TOL) =Toluene-d8 (85-114)

SMC4 (BFB) =4-Bromofluorobenzene (80-121)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: CHEMTECH Contract: IMPA01

Lab Code: CHEM CASE No.: A3899 SAS No.: A3899 SDG NO.: A3899

Level: (low/med) LOW

	EPA Sample NO.	SMC1 (DCE) #	SMC2 (DBFM) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	VBK0817S2	92	101	95	95	0
02	BSK0817S2	99	103	96	103	0
03	SP-1(3-4)	93	101	99	103	0
04	SP-2(11-12)	100	104	98	105	0
05	SP-3(2-4)	92	101	98	100	0
06	SB-3-13-14MS	97	100	96	103	0
07	SB-3-13-14MSD	93	101	97	101	0

QC LIMITS

SMC1 (DCE) = 1,2-Dichloroethane-d4 (72-141)

SMC2 (DBFM) =Dibromofluoromethane (70-139)

SMC3 (TOL) =Toluene-d8 (77-113)

SMC4 (BFB) =4-Bromofluorobenzene (45-124)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: FREU01

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : A3892-14

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC#	QC LIMITS REC
Dichlorodifluoromethane	56	0	35	63	(60-133)
Chloromethane	56	0	36	64	(61-132)
Vinyl Chloride	56	0	40	71	(64-128)
Bromomethane	56	0	50	89	(59-135)
Chloroethane	56	0	54	96	(60-144)
Trichlorofluoromethane	56	0	56	100	(65-140)
Tert butyl alcohol	281	0	170	60	(53-148)
1,1-Dichloroethene	56	0	52	93	(69-128)
Acrolein	281	0	180	64	(23-128)
Acrylonitrile	281	0	180	64	(56-140)
Acetone	281	0	180	64	(52-137)
Carbon Disulfide	56	0	50	89	(59-127)
Methyl tert-butyl Ether	56	0	47	84	(71-131)
Methylene Chloride	56	3.4	51	85	(66-128)
trans-1,2-Dichloroethene	56	0	49	88	(72-122)
Vinyl Acetate	281	0	240	85	(10-136)
1,1-Dichloroethane	56	0	52	93	(75-129)
2-Butanone	281	0	210	75	(59-137)
Carbon Tetrachloride	56	0	54	96	(75-123)
2,2-Dichloropropane	56	0	53	95	(68-129)
cis-1,2-Dichloroethene	56	0	48	86	(74-121)
Bromochloromethane	56	0	37	66*	(72-126)
Chloroform	56	0	56	100	(78-126)
1,1,1-Trichloroethane	56	0	58	104	(76-126)
1,1-Dichloropropene	56	0	55	98	(70-123)
Benzene	56	0	48	86	(78-118)
1,2-Dichloroethane	56	0	52	93	(76-126)
Trichloroethene	56	0	52	93	(66-133)
1,2-Dichloropropane	56	0	46	82	(78-120)
Dibromomethane	56	0	50	89	(71-127)
Bromodichloromethane	56	0	54	96	(79-121)
4-Methyl-2-Pentanone	281	0	220	78	(69-134)
Toluene	56	0	46	82	(77-117)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 82 outside limits

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: FREU01

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : A3892-14

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC#	QC LIMITS REC
t-1,3-Dichloropropene	56	0	52	93	(74-118)
cis-1,3-Dichloropropene	56	0	52	93	(76-116)
1,1,2-Trichloroethane	56	0	47	84	(78-121)
1,3-Dichloropropane	56	0	45	80	(73-126)
2-Chloroethyl vinyl ether	281	0	220	78	(19-181)
2-Hexanone	281	0	210	75	(65-149)
Dibromochloromethane	56	0	52	93	(76-120)
1,2-Dibromoethane	56	0	48	86	(74-118)
Tetrachloroethene	56	0	45	80	(56-147)
Chlorobenzene	56	0	50	89	(80-117)
1,1,1,2-Tetrachloroethane	56	0	55	98	(77-123)
Ethyl Benzene	56	0	52	93	(76-122)
m/p-Xylenes	112	0	95	85	(76-120)
o-Xylene	56	0	49	88	(74-122)
Styrene	56	0	50	89	(72-119)
Bromoform	56	0	53	95	(75-127)
Isopropylbenzene	56	0	53	95	(69-141)
1,1,2,2-Tetrachloroethane	56	0	43	77	(58-159)
1,2,3-Trichloropropane	56	0	46	82	(67-160)
Bromobenzene	56	0	53	95	(73-134)
n-propylbenzene	56	0	52	93	(67-135)
2-Chlorotoluene	56	0	50	89	(73-136)
1,3,5-Trimethylbenzene	56	0	51	91	(65-142)
4-Chlorotoluene	56	0	50	89	(72-130)
tert-Butylbenzene	56	0	54	96	(65-137)
1,2,4-Trimethylbenzene	56	0	48	86	(68-123)
sec-Butylbenzene	56	0	51	91	(63-136)
p-Isopropyltoluene	56	0	52	93	(68-129)
1,3-Dichlorobenzene	56	0	51	91	(79-116)
1,4-Dichlorobenzene	56	0	51	91	(78-115)
n-Butylbenzene	56	0	49	88	(64-123)
1,2-Dichlorobenzene	56	0	49	88	(77-118)
1,2-Dibromo-3-Chloropropane	56	0	45	80	(64-143)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 82 outside limits

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERYLab Name: CHEMTECH Contract: FREU01Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : A3892-14

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC#	QC LIMITS REC
1,2,4-Trichlorobenzene	56	0	50	89	(67-123)
Hexachlorobutadiene	56	0	56	100	(39-120)
Naphthalene	56	0	40	71	(54-125)
1,2,3-Trichlorobenzene	56	0	47	84	(48-118)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 2 Out of 82 outside limits

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: FREU01

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : A3892-15

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % % (ug/Kg)		QC LIMITS	
					RPD	REC
Dichlorodifluoromethane	56	35	63	0	20	(60-133)
Chloromethane	56	39	70	9	20	(61-132)
Vinyl Chloride	56	43	77	8	20	(64-128)
Bromomethane	56	50	89	0	20	(59-135)
Chloroethane	56	56	100	4	20	(60-144)
Trichlorofluoromethane	56	55	98	2	20	(65-140)
Tert butyl alcohol	281	170	60	0	20	(53-148)
1,1-Dichloroethene	56	51	91	2	20	(69-128)
Acrolein	281	220	78	20	20	(23-128)
Acrylonitrile	281	200	71	10	20	(56-140)
Acetone	281	190	68	6	20	(52-137)
Carbon Disulfide	56	53	95	7	20	(59-127)
Methyl tert-butyl Ether	56	50	89	6	20	(71-131)
Methylene Chloride	56	55	92	8	20	(66-128)
trans-1,2-Dichloroethene	56	51	91	3	20	(72-122)
Vinyl Acetate	281	250	89	5	20	(10-136)
1,1-Dichloroethane	56	53	95	2	20	(75-129)
2-Butanone	281	220	78	4	20	(59-137)
Carbon Tetrachloride	56	54	96	0	20	(75-123)
2,2-Dichloropropane	56	50	89	7	20	(68-129)
cis-1,2-Dichloroethene	56	50	89	3	20	(74-121)
Bromochloromethane	56	40	71*	7	20	(72-126)
Chloroform	56	56	100	0	20	(78-126)
1,1,1-Trichloroethane	56	57	102	2	20	(76-126)
1,1-Dichloropropene	56	55	98	0	20	(70-123)
Benzene	56	49	88	2	20	(78-118)
1,2-Dichloroethane	56	54	96	3	20	(76-126)
Trichloroethene	56	56	100	7	20	(66-133)
1,2-Dichloropropane	56	48	86	5	20	(78-120)
Dibromomethane	56	51	91	2	20	(71-127)
Bromodichloromethane	56	56	100	4	20	(79-121)
4-Methyl-2-Pentanone	281	220	78	0	20	(69-134)
Toluene	56	48	86	5	20	(77-117)

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

* Values outside of QC limits

RPD : 0 Out of 82 outside limits

Spike Recovery : 4 Out of 164 outside limits

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: FREU01

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : A3892-15

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % % (ug/Kg)		QC LIMITS	
					RPD	REC
t-1,3-Dichloropropene	56	55	98	5	20	(74-118)
cis-1,3-Dichloropropene	56	53	95	2	20	(76-116)
1,1,2-Trichloroethane	56	50	89	6	20	(78-121)
1,3-Dichloropropane	56	49	88	10	20	(73-126)
2-Chloroethyl vinyl ether	281	230	82	5	20	(19-181)
2-Hexanone	281	210	75	0	20	(65-149)
Dibromochloromethane	56	53	95	2	20	(76-120)
1,2-Dibromoethane	56	49	88	2	20	(74-118)
Tetrachloroethene	56	45	80	0	20	(56-147)
Chlorobenzene	56	53	95	7	20	(80-117)
1,1,1,2-Tetrachloroethane	56	57	102	4	20	(77-123)
Ethyl Benzene	56	52	93	0	20	(76-122)
m/p-Xylenes	112	100	89	5	20	(76-120)
o-Xylene	56	50	89	1	20	(74-122)
Styrene	56	55	98	10	20	(72-119)
Bromoform	56	55	98	3	20	(75-127)
Isopropylbenzene	56	52	93	2	20	(69-141)
1,1,2,2-Tetrachloroethane	56	44	79	3	20	(58-159)
1,2,3-Trichloropropane	56	44	79	4	20	(67-160)
Bromobenzene	56	53	95	0	20	(73-134)
n-propylbenzene	56	51	91	2	20	(67-135)
2-Chlorotoluene	56	53	95	7	20	(73-136)
1,3,5-Trimethylbenzene	56	51	91	0	20	(65-142)
4-Chlorotoluene	56	52	93	4	20	(72-130)
tert-Butylbenzene	56	58	104	8	20	(65-137)
1,2,4-Trimethylbenzene	56	50	89	3	20	(68-123)
sec-Butylbenzene	56	52	93	2	20	(63-136)
p-Isopropyltoluene	56	54	96	3	20	(68-129)
1,3-Dichlorobenzene	56	53	95	4	20	(79-116)
1,4-Dichlorobenzene	56	51	91	0	20	(78-115)
n-Butylbenzene	56	49	88	0	20	(64-123)
1,2-Dichlorobenzene	56	52	93	6	20	(77-118)
1,2-Dibromo-3-Chloropropane	56	46	82	2	20	(64-143)

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

* Values outside of QC limits

RPD : 0 Out of 82 outside limits

Spike Recovery : 4 Out of 164 outside limits

SOLID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
Lab Name: CHEMTECH **Contract:** FREU01
Lab Code: CHEM **Cas No:** A3899 **SAS No :** A3899 **SDG No:** A3899
Matrix Spike - EPA Sample No : A3892-15

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % % (ug/Kg)		QC LIMITS	
					RPD	REC
1,2,4-Trichlorobenzene	56	50	89	0	20	(67-123)
Hexachlorobutadiene	56	55	98	2	20	(39-120)
Naphthalene	56	43	77	8	20	(54-125)
1,2,3-Trichlorobenzene	56	50	89	6	20	(48-118)

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

* Values outside of QC limits

RPD : 0 Out of 82 outside limits

Spike Recovery : 4 Out of 164 outside limits



3B

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSG0813W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		13	65	(50-109)
Chloromethane	20		17	85	(55-129)
Vinyl Chloride	20		17	85	(61-127)
Bromomethane	20		19	95	(61-129)
Chloroethane	20		18	90	(63-131)
Trichlorofluoromethane	20		17	85	(69-123)
Tert butyl alcohol	100		98	98	(63-130)
1,1-Dichloroethene	20		18	90	(70-122)
Acrolein	100		100	100	(57-135)
Acrylonitrile	100		100	100	(69-134)
Acetone	100		77	77	(66-132)
Carbon Disulfide	20		18	90	(56-135)
Methyl tert-butyl Ether	20		19	95	(74-130)
Methylene Chloride	20		18	90	(74-125)
trans-1,2-Dichloroethene	20		19	95	(72-124)
Vinyl Acetate	100		85	85	(61-145)
1,1-Dichloroethane	20		19	95	(77-129)
2-Butanone	100		100	100	(72-136)
Carbon Tetrachloride	20		20	100	(72-125)
2,2-Dichloropropane	20		16	80	(72-128)
cis-1,2-Dichloroethene	20		20	100	(76-125)
Bromochloromethane	20		20	100	(77-128)
Chloroform	20		19	95	(79-126)
1,1,1-Trichloroethane	20		19	95	(76-121)
1,1-Dichloropropene	20		19	95	(78-120)
Benzene	20		20	100	(77-123)
1,2-Dichloroethane	20		19	95	(77-125)
Trichloroethene	20		20	100	(76-122)
1,2-Dichloropropane	20		20	100	(79-125)
Dibromomethane	20		20	100	(79-125)
Bromodichloromethane	20		19	95	(78-123)
4-Methyl-2-Pentanone	100		96	96	(77-132)
Toluene	20		19	95	(78-122)
t-1,3-Dichloropropene	20		19	95	(77-123)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

Comments: _____

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSG0813W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
cis-1,3-Dichloropropene	20		19	95	(77-121)
1,1,2-Trichloroethane	20		21	105	(78-124)
1,3-Dichloropropane	20		19	95	(80-125)
2-Chloroethyl Vinyl ether	100		120	120	(70-135)
2-Hexanone	100		110	110	(72-137)
Dibromochloromethane	20		20	100	(76-125)
1,2-Dibromoethane	20		20	100	(78-125)
Tetrachloroethene	20		27	135	(60-154)
Chlorobenzene	20		20	100	(78-122)
1,1,1,2-Tetrachloroethane	20		20	100	(77-117)
Ethyl Benzene	20		21	105	(77-122)
m/p-Xylenes	40		40	100	(76-122)
o-Xylene	20		20	100	(76-122)
Styrene	20		20	100	(77-124)
Bromoform	20		19	95	(73-140)
Isopropylbenzene	20		21	105	(77-122)
1,1,2,2-Tetrachloroethane	20		20	100	(75-124)
1,2,3-Trichloropropane	20		20	100	(75-125)
Bromobenzene	20		20	100	(80-118)
n-propylbenzene	20		20	100	(79-123)
2-Chlorotoluene	20		20	100	(79-123)
1,3,5-Trimethylbenzene	20		20	100	(79-122)
4-Chlorotoluene	20		20	100	(79-122)
tert-Butylbenzene	20		18	90	(78-121)
1,2,4-Trimethylbenzene	20		20	100	(79-122)
sec-Butylbenzene	20		20	100	(80-122)
p-Isopropyltoluene	20		20	100	(79-120)
1,3-Dichlorobenzene	20		20	100	(77-120)
1,4-Dichlorobenzene	20		20	100	(76-120)
n-Butylbenzene	20		20	100	(79-123)
1,2-Dichlorobenzene	20		20	100	(77-121)
1,2-Dibromo-3-Chloropropane	20		20	100	(68-126)
1,2,4-Trichlorobenzene	20		19	95	(73-121)
Hexachlorobutadiene	20		18	90	(55-132)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

Comments: _____



3B

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSG0813W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS	QC
				% REC#	LIMITS REC
Naphthalene	20		19	95	(75-122)
1,2,3-Trichlorobenzene	20		19	95	(72-122)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 0 Out of 77 outside limits

Comments: _____

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSG0813W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Dichlorodifluoromethane	20	14	70	7	20	(50-109)
Chloromethane	20	18	90	6	20	(55-129)
Vinyl Chloride	20	18	90	6	20	(61-127)
Bromomethane	20	19	95	0	20	(61-129)
Chloroethane	20	19	95	5	20	(63-131)
Trichlorofluoromethane	20	18	90	6	20	(69-123)
Tert butyl alcohol	100	110	110	12	20	(63-130)
1,1-Dichloroethene	20	20	100	11	20	(70-122)
Acrolein	100	110	110	10	20	(57-135)
Acrylonitrile	100	110	110	10	20	(69-134)
Acetone	100	85	85	10	20	(66-132)
Carbon Disulfide	20	20	100	11	20	(56-135)
Methyl tert-butyl Ether	20	20	100	5	20	(74-130)
Methylene Chloride	20	20	100	11	20	(74-125)
trans-1,2-Dichloroethene	20	20	100	5	20	(72-124)
Vinyl Acetate	100	99	99	15	20	(61-145)
1,1-Dichloroethane	20	21	105	10	20	(77-129)
2-Butanone	100	110	110	10	20	(72-136)
Carbon Tetrachloride	20	19	95	5	20	(72-125)
2,2-Dichloropropane	20	18	90	12	20	(72-128)
cis-1,2-Dichloroethene	20	21	105	5	20	(76-125)
Bromochloromethane	20	21	105	5	20	(77-128)
Chloroform	20	21	105	10	20	(79-126)
1,1,1-Trichloroethane	20	21	105	10	20	(76-121)
1,1-Dichloropropene	20	21	105	10	20	(78-120)
Benzene	20	21	105	5	20	(77-123)
1,2-Dichloroethane	20	20	100	5	20	(77-125)
Trichloroethene	20	21	105	5	20	(76-122)
1,2-Dichloropropane	20	21	105	5	20	(79-125)
Dibromomethane	20	21	105	5	20	(79-125)
Bromodichloromethane	20	21	105	10	20	(78-123)
4-Methyl-2-Pentanone	100	110	110	14	20	(77-132)
Toluene	20	21	105	10	20	(78-122)
t-1,3-Dichloropropene	20	21	105	10	20	(77-123)

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

* Values outside of QC limits

RPD : 1 Out of 77 outside limits

Spike Recovery : 2 Out of 77 outside limits

Comments: _____

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSG0813W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
cis-1,3-Dichloropropene	20	21	105	10	20	(77-121)
1,1,2-Trichloroethane	20	22	110	5	20	(78-124)
1,3-Dichloropropane	20	22	110	15	20	(80-125)
2-Chloroethyl Vinyl ether	100	140	140*	15	20	(70-135)
2-Hexanone	100	180	180*	48*	20	(72-137)
Dibromochloromethane	20	22	110	10	20	(76-125)
1,2-Dibromoethane	20	22	110	10	20	(78-125)
Tetrachloroethene	20	26	130	4	20	(60-154)
Chlorobenzene	20	21	105	5	20	(78-122)
1,1,1,2-Tetrachloroethane	20	20	100	0	20	(77-117)
Ethyl Benzene	20	21	105	0	20	(77-122)
m/p-Xylenes	40	42	105	5	20	(76-122)
o-Xylene	20	21	105	5	20	(76-122)
Styrene	20	21	105	5	20	(77-124)
Bromoform	20	20	100	5	20	(73-140)
Isopropylbenzene	20	21	105	0	20	(77-122)
1,1,2,2-Tetrachloroethane	20	21	105	5	20	(75-124)
1,2,3-Trichloropropane	20	21	105	5	20	(75-125)
Bromobenzene	20	21	105	5	20	(80-118)
n-propylbenzene	20	20	100	0	20	(79-123)
2-Chlorotoluene	20	21	105	5	20	(79-123)
1,3,5-Trimethylbenzene	20	21	105	5	20	(79-122)
4-Chlorotoluene	20	21	105	5	20	(79-122)
tert-Butylbenzene	20	20	100	11	20	(78-121)
1,2,4-Trimethylbenzene	20	21	105	5	20	(79-122)
sec-Butylbenzene	20	21	105	5	20	(80-122)
p-Isopropyltoluene	20	21	105	5	20	(79-120)
1,3-Dichlorobenzene	20	20	100	0	20	(77-120)
1,4-Dichlorobenzene	20	21	105	5	20	(76-120)
n-Butylbenzene	20	20	100	0	20	(79-123)
1,2-Dichlorobenzene	20	21	105	5	20	(77-121)
1,2-Dibromo-3-Chloropropane	20	21	105	5	20	(68-126)
1,2,4-Trichlorobenzene	20	20	100	5	20	(73-121)
Hexachlorobutadiene	20	20	100	11	20	(55-132)

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

* Values outside of QC limits

RPD : 1 Out of 77 outside limits

Spike Recovery : 2 Out of 77 outside limits

Comments: _____



3B

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSG0813W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Naphthalene	20	21	105	10	20	(75-122)
1,2,3-Trichlorobenzene	20	20	100	5	20	(72-122)

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

* Values outside of QC limits

RPD : 1 Out of 77 outside limits

Spike Recovery : 2 Out of 77 outside limits

Comments: _____

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSG0814W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		14	70	(50-109)
Chloromethane	20		17	85	(55-129)
Vinyl Chloride	20		17	85	(61-127)
Bromomethane	20		17	85	(61-129)
Chloroethane	20		17	85	(63-131)
Trichlorofluoromethane	20		18	90	(69-123)
Tert butyl alcohol	100		96	96	(63-130)
1,1-Dichloroethene	20		19	95	(70-122)
Acrolein	100		97	97	(57-135)
Acrylonitrile	100		98	98	(69-134)
Acetone	100		82	82	(66-132)
Carbon Disulfide	20		18	90	(56-135)
Methyl tert-butyl Ether	20		19	95	(74-130)
Methylene Chloride	20		18	90	(74-125)
trans-1,2-Dichloroethene	20		20	100	(72-124)
Vinyl Acetate	100		74	74	(61-145)
1,1-Dichloroethane	20		19	95	(77-129)
2-Butanone	100		110	110	(72-136)
Carbon Tetrachloride	20		21	105	(72-125)
2,2-Dichloropropane	20		19	95	(72-128)
cis-1,2-Dichloroethene	20		19	95	(76-125)
Bromochloromethane	20		22	110	(77-128)
Chloroform	20		20	100	(79-126)
1,1,1-Trichloroethane	20		20	100	(76-121)
1,1-Dichloropropene	20		21	105	(78-120)
Benzene	20		20	100	(77-123)
1,2-Dichloroethane	20		20	100	(77-125)
Trichloroethene	20		20	100	(76-122)
1,2-Dichloropropane	20		20	100	(79-125)
Dibromomethane	20		20	100	(79-125)
Bromodichloromethane	20		20	100	(78-123)
4-Methyl-2-Pentanone	100		100	100	(77-132)
Toluene	20		20	100	(78-122)
t-1,3-Dichloropropene	20		21	105	(77-123)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 1 Out of 77 outside limits

Comments: _____

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSG0814W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
cis-1,3-Dichloropropene	20		20	100	(77-121)
1,1,2-Trichloroethane	20		21	105	(78-124)
1,3-Dichloropropane	20		21	105	(80-125)
2-Chloroethyl Vinyl ether	100		130	130	(70-135)
2-Hexanone	100		110	110	(72-137)
Dibromochloromethane	20		21	105	(76-125)
1,2-Dibromoethane	20		21	105	(78-125)
Tetrachloroethene	20		31	155*	(60-154)
Chlorobenzene	20		21	105	(78-122)
1,1,1,2-Tetrachloroethane	20		20	100	(77-117)
Ethyl Benzene	20		20	100	(77-122)
m/p-Xylenes	40		40	100	(76-122)
o-Xylene	20		20	100	(76-122)
Styrene	20		21	105	(77-124)
Bromoform	20		20	100	(73-140)
Isopropylbenzene	20		21	105	(77-122)
1,1,2,2-Tetrachloroethane	20		19	95	(75-124)
1,2,3-Trichloropropane	20		20	100	(75-125)
Bromobenzene	20		20	100	(80-118)
n-propylbenzene	20		21	105	(79-123)
2-Chlorotoluene	20		22	110	(79-123)
1,3,5-Trimethylbenzene	20		20	100	(79-122)
4-Chlorotoluene	20		21	105	(79-122)
tert-Butylbenzene	20		18	90	(78-121)
1,2,4-Trimethylbenzene	20		21	105	(79-122)
sec-Butylbenzene	20		21	105	(80-122)
p-Isopropyltoluene	20		20	100	(79-120)
1,3-Dichlorobenzene	20		20	100	(77-120)
1,4-Dichlorobenzene	20		20	100	(76-120)
n-Butylbenzene	20		20	100	(79-123)
1,2-Dichlorobenzene	20		20	100	(77-121)
1,2-Dibromo-3-Chloropropane	20		20	100	(68-126)
1,2,4-Trichlorobenzene	20		20	100	(73-121)
Hexachlorobutadiene	20		20	100	(55-132)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 1 Out of 77 outside limits

Comments: _____



3B

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSG0814W1

COMPOUND	SPIKE ADDED (ug/L)	CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC#	QC LIMITS REC
Naphthalene	20		20	100	(75-122)
1,2,3-Trichlorobenzene	20		19	95	(72-122)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 1 Out of 77 outside limits

Comments: _____



3B

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSG0814W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Dichlorodifluoromethane	20	15	75	7	20	(50-109)
Chloromethane	20	18	90	6	20	(55-129)
Vinyl Chloride	20	18	90	6	20	(61-127)
Bromomethane	20	19	95	11	20	(61-129)
Chloroethane	20	18	90	6	20	(63-131)
Trichlorofluoromethane	20	19	95	5	20	(69-123)
Tert butyl alcohol	100	110	110	14	20	(63-130)
1,1-Dichloroethene	20	19	95	0	20	(70-122)
Acrolein	100	99	99	2	20	(57-135)
Acrylonitrile	100	100	100	2	20	(69-134)
Acetone	100	86	86	5	20	(66-132)
Carbon Disulfide	20	19	95	5	20	(56-135)
Methyl tert-butyl Ether	20	20	100	5	20	(74-130)
Methylene Chloride	20	19	95	5	20	(74-125)
trans-1,2-Dichloroethene	20	19	95	5	20	(72-124)
Vinyl Acetate	100	73	73	1	20	(61-145)
1,1-Dichloroethane	20	20	100	5	20	(77-129)
2-Butanone	100	110	110	0	20	(72-136)
Carbon Tetrachloride	20	22	110	5	20	(72-125)
2,2-Dichloropropane	20	19	95	0	20	(72-128)
cis-1,2-Dichloroethene	20	20	100	5	20	(76-125)
Bromochloromethane	20	20	100	10	20	(77-128)
Chloroform	20	20	100	0	20	(79-126)
1,1,1-Trichloroethane	20	21	105	5	20	(76-121)
1,1-Dichloropropene	20	21	105	0	20	(78-120)
Benzene	20	20	100	0	20	(77-123)
1,2-Dichloroethane	20	21	105	5	20	(77-125)
Trichloroethene	20	21	105	5	20	(76-122)
1,2-Dichloropropane	20	21	105	5	20	(79-125)
Dibromomethane	20	21	105	5	20	(79-125)
Bromodichloromethane	20	21	105	5	20	(78-123)
4-Methyl-2-Pentanone	100	100	100	0	20	(77-132)
Toluene	20	21	105	5	20	(78-122)
t-1,3-Dichloropropene	20	21	105	0	20	(77-123)

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

* Values outside of QC limits

RPD : 0 Out of 77 outside limits

Spike Recovery : 1 Out of 77 outside limits

Comments: _____

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSG0814W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
cis-1,3-Dichloropropene	20	21	105	5	20	(77-121)
1,1,2-Trichloroethane	20	22	110	5	20	(78-124)
1,3-Dichloropropane	20	22	110	5	20	(80-125)
2-Chloroethyl Vinyl ether	100	130	130	0	20	(70-135)
2-Hexanone	100	120	120	9	20	(72-137)
Dibromochloromethane	20	21	105	0	20	(76-125)
1,2-Dibromoethane	20	22	110	5	20	(78-125)
Tetrachloroethene	20	31	155*	0	20	(60-154)
Chlorobenzene	20	20	100	5	20	(78-122)
1,1,1,2-Tetrachloroethane	20	20	100	0	20	(77-117)
Ethyl Benzene	20	22	110	10	20	(77-122)
m/p-Xylenes	40	41	103	3	20	(76-122)
o-Xylene	20	20	100	0	20	(76-122)
Styrene	20	21	105	0	20	(77-124)
Bromoform	20	20	100	0	20	(73-140)
Isopropylbenzene	20	20	100	5	20	(77-122)
1,1,2,2-Tetrachloroethane	20	19	95	0	20	(75-124)
1,2,3-Trichloropropane	20	21	105	5	20	(75-125)
Bromobenzene	20	20	100	0	20	(80-118)
n-propylbenzene	20	21	105	0	20	(79-123)
2-Chlorotoluene	20	20	100	10	20	(79-123)
1,3,5-Trimethylbenzene	20	20	100	0	20	(79-122)
4-Chlorotoluene	20	20	100	5	20	(79-122)
tert-Butylbenzene	20	18	90	0	20	(78-121)
1,2,4-Trimethylbenzene	20	21	105	0	20	(79-122)
sec-Butylbenzene	20	21	105	0	20	(80-122)
p-Isopropyltoluene	20	20	100	0	20	(79-120)
1,3-Dichlorobenzene	20	20	100	0	20	(77-120)
1,4-Dichlorobenzene	20	20	100	0	20	(76-120)
n-Butylbenzene	20	20	100	0	20	(79-123)
1,2-Dichlorobenzene	20	20	100	0	20	(77-121)
1,2-Dibromo-3-Chloropropane	20	21	105	5	20	(68-126)
1,2,4-Trichlorobenzene	20	20	100	0	20	(73-121)
Hexachlorobutadiene	20	19	95	5	20	(55-132)

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

* Values outside of QC limits

RPD : 0 Out of 77 outside limits

Spike Recovery : 1 Out of 77 outside limits

Comments: _____



3B

WATER VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSG0814W2

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD		QC LIMITS	
			% REC #	% RPD #	RPD	REC
Naphthalene	20	20	100	0	20	(75-122)
1,2,3-Trichlorobenzene	20	19	95	0	20	(72-122)

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

* Values outside of QC limits

RPD : 0 Out of 77 outside limits

Spike Recovery : 1 Out of 77 outside limits

Comments: _____

SOIL VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSK0817S2

COMPOUND	SPIKE ADDED (ug/Kg)	CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC#	QC LIMITS REC
Dichlorodifluoromethane	20		21	105	(64-131)
Chloromethane	20		19	95	(71-130)
Vinyl Chloride	20		17	85	(73-125)
Bromomethane	20		20	100	(64-139)
Chloroethane	20		21	105	(62-141)
Trichlorofluoromethane	20		22	110	(70-131)
Tert butyl alcohol	100		83	83	(73-134)
1,1-Dichloroethene	20		20	100	(77-124)
Acrolein	100		100	100	(64-131)
Acrylonitrile	100		81	81	(76-133)
Acetone	100		80	80	(72-133)
Carbon Disulfide	20		20	100	(73-125)
Methyl tert-butyl Ether	20		18	90	(80-121)
Methylene Chloride	20		20	100	(76-128)
trans-1,2-Dichloroethene	20		19	95	(82-120)
Vinyl Acetate	100		98	98	(76-129)
1,1-Dichloroethane	20		19	95	(84-123)
2-Butanone	100		86	86	(69-136)
Carbon Tetrachloride	20		21	105	(82-114)
2,2-Dichloropropane	20		20	100	(80-120)
cis-1,2-Dichloroethene	20		18	90	(84-120)
Bromochloromethane	20		16	80*	(83-120)
Chloroform	20		20	100	(85-125)
1,1,1-Trichloroethane	20		20	100	(84-119)
1,1-Dichloropropene	20		21	105	(84-113)
Benzene	20		18	90	(86-115)
1,2-Dichloroethane	20		20	100	(84-122)
Trichloroethene	20		19	95	(84-113)
1,2-Dichloropropane	20		17	85	(84-118)
Dibromomethane	20		19	95	(85-117)
Bromodichloromethane	20		20	100	(85-116)
4-Methyl-2-Pentanone	100		93	93	(82-129)
Toluene	20		17	85	(85-114)
t-1,3-Dichloropropene	20		20	100	(84-118)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 7 Out of 82 outside limits

Comments: _____

SOIL VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____

Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899

Matrix Spike - EPA Sample No : BSK0817S2

COMPOUND	SPIKE ADDED (ug/Kg)	CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC#	QC LIMITS REC
cis-1,3-Dichloropropene	20		19	95	(86-115)
1,1,2-Trichloroethane	20		18	90	(84-118)
1,3-Dichloropropane	20		18	90	(84-121)
2-Chloroethyl vinyl ether	100		88	88	(71-129)
2-Hexanone	100		88	88	(71-137)
Dibromochloromethane	20		19	95	(82-117)
1,2-Dibromoethane	20		18	90	(84-118)
Tetrachloroethene	20		18	90	(75-131)
Chlorobenzene	20		19	95	(86-113)
1,1,1,2-Tetrachloroethane	20		20	100	(85-113)
Ethyl Benzene	20		19	95	(84-113)
m/p-Xylenes	40		35	88	(85-113)
o-Xylene	20		17	85	(85-112)
Styrene	20		19	95	(86-112)
Bromoform	20		21	105	(80-116)
Isopropylbenzene	20		19	95	(85-116)
1,1,2,2-Tetrachloroethane	20		17	85*	(86-121)
1,2,3-Trichloropropane	20		18	90	(87-121)
Bromobenzene	20		19	95	(86-115)
n-propylbenzene	20		18	90	(85-118)
2-Chlorotoluene	20		19	95	(79-123)
1,3,5-Trimethylbenzene	20		18	90	(88-115)
4-Chlorotoluene	20		18	90	(88-115)
tert-Butylbenzene	20		20	100	(84-116)
1,2,4-Trimethylbenzene	20		18	90	(87-115)
sec-Butylbenzene	20		19	95	(86-116)
p-Isopropyltoluene	20		18	90	(85-115)
1,3-Dichlorobenzene	20		19	95	(88-114)
1,4-Dichlorobenzene	20		18	90	(88-112)
n-Butylbenzene	20		18	90	(85-116)
1,2-Dichlorobenzene	20		18	90	(88-115)
1,2-Dibromo-3-Chloropropane	20		17	85	(77-121)
1,2,4-Trichlorobenzene	20		18	90	(80-115)
Hexachlorobutadiene	20		20	100	(78-118)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 7 Out of 82 outside limits

Comments: _____



3A

SOIL VOLATILE LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: _____Lab Code: CHEM Cas No: A3899 SAS No : A3899 SDG No: A3899Matrix Spike - EPA Sample No : BSK0817S2

COMPOUND	SPIKE ADDED (ug/Kg)	CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS	QC
				% REC#	LIMITS REC
Naphthalene	20		16	80	(71-123)
1,2,3-Trichlorobenzene	20		18	90	(82-115)

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

* Values outside of QC limits

RPD : 0 Out of 0 outside limits

Spike Recovery : 7 Out of 82 outside limits

Comments: _____



4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG0813W2

Lab Name: CHEMTECHContract: IMPA01Lab Code: CHEM Case No.: A3899SAS No.: A3899 SDG NO.: A3899Lab File ID: VG020723.DLab Sample ID: VBG0813W2Date Analyzed: 08/13/2009Time Analyzed: 15:18GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG0813W1	BSG0813W1	VG020724.D	08/13/2009
BSG0813W2	BSG0813W2	VG020725.D	08/13/2009
TRIPBLANK	A3899-02	VG020726.D	08/13/2009
FIELDBLANK	A3899-01	VG020727.D	08/13/2009

COMMENTS: _____

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0813W2

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: VBG0813W2

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020723.D

Level: (low/med) Date Received:

% Moisture: not dec. 100 Date Analyzed: 08/13/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0813W2

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: VBG0813W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020723.D

Level: (low/med) _____ Date Received: _____

% Moisture: not dec. 100 Date Analyzed: 08/13/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0813W2

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: VBG0813W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020723.D

Level: (low/med) _____ Date Received: _____

% Moisture: not dec. 100 Date Analyzed: 08/13/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U



4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBG0814W2

Lab Name: CHEMTECHContract: IMPA01Lab Code: CHEM Case No.: A3899SAS No.: A3899 SDG NO.: A3899Lab File ID: VG020732.DLab Sample ID: VBG0814W2Date Analyzed: 08/14/2009Time Analyzed: 10:28GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOAG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSG0814W1	BSG0814W1	VG020733.D	08/14/2009
BSG0814W2	BSG0814W2	VG020734.D	08/14/2009
MW-4	A3899-04	VG020746.D	08/14/2009
MW-5	A3899-05	VG020747.D	08/14/2009
MW-7	A3899-06	VG020748.D	08/14/2009
MW-8	A3899-07	VG020749.D	08/14/2009
MW-12	A3899-08	VG020750.D	08/14/2009

COMMENTS: _____

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0814W2

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): WATER Lab Sample ID: VBG0814W2

Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020732.D

Level: (low/med) Date Received:

% Moisture: not dec. 100 Date Analyzed: 08/14/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-65-0	Tert butyl alcohol	5	U
75-35-4	1,1-Dichloroethene	1	U
107-02-8	Acrolein	5	U
107-13-1	Acrylonitrile	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	1	U
1634-04-4	Methyl tert-butyl Ether	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
108-05-4	Vinyl Acetate	5	U
75-34-3	1,1-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
56-23-5	Carbon Tetrachloride	1	U
594-20-7	2,2-Dichloropropane	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0814W2

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: VBG0814W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020732.D

Level: (low/med) _____ Date Received: _____

% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	1	U
10061-02-6	t-1,3-Dichloropropene	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
142-28-9	1,3-Dichloropropane	1	U
110-75-8	2-Chloroethyl Vinyl ether	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
127-18-4	Tetrachloroethene	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethyl Benzene	1	U
179601-23-1	m/p-Xylenes	2	U
95-47-6	o-Xylene	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
96-18-4	1,2,3-Trichloropropane	1	U
108-86-1	Bromobenzene	1	U
103-65-1	n-propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBG0814W2

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): WATER Lab Sample ID: VBG0814W2Sample wt/vol: 5 (g/mL) ml Lab File ID: VG020732.D

Level: (low/med) _____ Date Received: _____

% Moisture: not dec. 100 Date Analyzed: 08/14/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	p-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-Chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U



4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBK0817S2

Lab Name: CHEMTECHContract: IMPA01Lab Code: CHEM Case No.: A3899SAS No.: A3899 SDG NO.: A3899Lab File ID: VK034322.DLab Sample ID: VBK0817S2Date Analyzed: 08/17/2009Time Analyzed: 11:17GC Column: RTX-VMS ID: 0.18 (mm)Heated Purge: (Y/N) YInstrument ID: MSVOAK

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSK0817S2	BSK0817S2	VK034324.D	08/17/2009
SP-1 (3-4)	A3899-09	VK034327.D	08/17/2009
SP-2 (11-12)	A3899-10	VK034328.D	08/17/2009
SP-3 (2-4)	A3899-11	VK034329.D	08/17/2009
SB-3-13-14MS	A3892-14MS	VK034331.D	08/17/2009
SB-3-13-14MSD	A3892-15MSD	VK034332.D	08/17/2009

COMMENTS: _____

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBK0817S2

Lab Name: Chemtech Contract: Impact Environmental

Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899

Matrix (soil/water): SOIL Lab Sample ID: VBK0817S2

Sample wt/vol: 5 (g/mL) g Lab File ID: VK034322.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. 0 Date Analyzed: 08/17/09

GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1

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

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-65-0	Tert butyl alcohol	25	U
75-35-4	1,1-Dichloroethene	5	U
107-02-8	Acrolein	25	U
107-13-1	Acrylonitrile	25	U
67-64-1	Acetone	25	U
75-15-0	Carbon Disulfide	5	U
1634-04-4	Methyl tert-butyl Ether	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
108-05-4	Vinyl Acetate	25	U
75-34-3	1,1-Dichloroethane	5	U
78-93-3	2-Butanone	25	U
56-23-5	Carbon Tetrachloride	5	U
594-20-7	2,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
563-58-6	1,1-Dichloropropene	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U



VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBK0817S2

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: VBK0817S2Sample wt/vol: 5 (g/mL) g Lab File ID: VK034322.DLevel: (low/med) LOW Date Received: _____% Moisture: not dec. 0 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
108-10-1	4-Methyl-2-Pentanone	25	U
108-88-3	Toluene	5	U
10061-02-6	t-1,3-Dichloropropene	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
142-28-9	1,3-Dichloropropane	5	U
110-75-8	2-Chloroethyl vinyl ether	25	U
591-78-6	2-Hexanone	25	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethyl Benzene	5	U
179601-23-1	m/p-Xylenes	10	U
95-47-6	o-Xylene	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
108-86-1	Bromobenzene	5	U
103-65-1	n-propylbenzene	5	U
95-49-8	2-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
106-43-4	4-Chlorotoluene	5	U
98-06-6	tert-Butylbenzene	5	U



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBK0817S2

Lab Name: Chemtech Contract: Impact EnvironmentalLab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG No.: A3899Matrix (soil/water): SOIL Lab Sample ID: VBK0817S2Sample wt/vol: 5 (g/mL) g Lab File ID: VK034322.DLevel: (low/med) LOW Date Received: _____% Moisture: not dec. 0 Date Analyzed: 08/17/09GC Column: RTX-VMS ID: 0.18 (mm) Dilution Factor: 1Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
99-87-6	p-Isopropyltoluene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
104-51-8	n-Butylbenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-Chloropropane	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
91-20-3	Naphthalene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPA01
Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG NO.: A3899
Lab File ID: VG020730.D Date Analyzed: 08/14/2009
Instrument ID: MSVOAG Time Analyzed: 09:19
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1169259	3.67	2053960	4.42	1890842	9.39
UPPER LIMIT	2338518	4.17	4107920	4.92	3781684	9.89
LOWER LIMIT	584629.5	3.17	1026980	3.92	945421	8.89
EPA SAMPLE NO.						
MW-4	1121500	3.67	1948765	4.42	1721897	9.38
MW-5	1160176	3.67	2019345	4.43	1767161	9.39
MW-7	1104784	3.68	1982280	4.42	1739335	9.38
MW-8	1084272	3.68	1961920	4.42	1767275	9.39
MW-12	1097037	3.67	2007437	4.43	1713130	9.39
BSG0814W1	1209078	3.67	2171344	4.42	1911264	9.38
BSG0814W2	1174954	3.66	2088374	4.41	1882459	9.38
VBG0814W2	1270757	3.67	2271169	4.42	1918650	9.39

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPA01
Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG NO.: A3899
Lab File ID: VG020730.D Date Analyzed: 08/14/2009
Instrument ID: MSVOAG Time Analyzed: 09:19
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	845427	13.12				
UPPER LIMIT	1690854	13.62				
LOWER LIMIT	422713.5	12.62				
EPA SAMPLE NO.						
MW-4	801713	13.11				
MW-5	759560	13.10				
MW-7	756987	13.10				
MW-8	753067	13.11				
MW-12	789246	13.11				
BSG0814W1	844093	13.10				
BSG0814W2	852474	13.11				
VBG0814W2	870879	13.11				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPA01
Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG NO.: A3899
Lab File ID: VK034320.D Date Analyzed: 08/17/2009
Instrument ID: MSVOAK Time Analyzed: 10:03
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	198974	3.19	307362	3.57	428599	6.26
UPPER LIMIT	397948	3.69	614724	4.07	857198	6.76
LOWER LIMIT	99487	2.69	153681	3.07	214299.5	5.76
EPA SAMPLE NO.						
SB-3-13-14MS	213780	3.19	336640	3.57	447041	6.26
SB-3-13-14MSD	219103	3.18	341895	3.57	440753	6.26
SP-1(3-4)	214916	3.19	321962	3.57	419644	6.26
SP-2(11-12)	209027	3.18	330400	3.57	449299	6.26
SP-3(2-4)	214549	3.18	333597	3.57	435414	6.26
BSK0817S2	205625	3.19	316773	3.57	424000	6.26
VBK0817S2	227350	3.19	352947	3.57	455984	6.26

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPA01
Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG NO.: A3899
Lab File ID: VK034320.D Date Analyzed: 08/17/2009
Instrument ID: MSVOAK Time Analyzed: 10:03
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	240750	8.59				
UPPER LIMIT	481500	9.09				
LOWER LIMIT	120375	8.09				
EPA SAMPLE NO.						
SB-3-13-14MS	240080	8.59				
SB-3-13-14MSD	242863	8.59				
SP-1(3-4)	236795	8.59				
SP-2(11-12)	248434	8.59				
SP-3(2-4)	227725	8.59				
BSK0817S2	240505	8.59				
VBK0817S2	256443	8.59				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPA01
Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG NO.: A3899
Lab File ID: VG020715.D Date Analyzed: 08/13/2009
Instrument ID: MSVOAG Time Analyzed: 10:11
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	1156947	3.68	2122222	4.43	1851442	9.39
UPPER LIMIT	2313894	4.18	4244444	4.93	3702884	9.89
LOWER LIMIT	578473.5	3.18	1061111	3.93	925721	8.89
EPA SAMPLE NO.						
FIELD BLANK	1183684	3.67	2113935	4.41	1786645	9.39
TRIP BLANK	1202672	3.66	2151259	4.42	1841616	9.39
BSG0813W1	1256872	3.67	2292163	4.42	1970059	9.39
BSG0813W2	1191112	3.68	2141511	4.43	1961980	9.40
VBG0813W2	1286461	3.68	2301347	4.42	1961352	9.40

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% 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 QC limits with an asterisk.

* Values outside of QC limits.



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPA01
Lab Code: CHEM Case No.: A3899 SAS No.: A3899 SDG NO.: A3899
Lab File ID: VG020715.D Date Analyzed: 08/13/2009
Instrument ID: MSVOAG Time Analyzed: 10:11
GC Column: RTX-VMS ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	844286	13.12				
UPPER LIMIT	1688572	13.62				
LOWER LIMIT	422143	12.62				
EPA SAMPLE NO.						
FIELDBLANK	785423	13.11				
TRIPBLANK	817140	13.11				
BSG0813W1	883258	13.11				
BSG0813W2	866339	13.12				
VBG0813W2	853609	13.11				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.



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Report of Analysis

Client:	Impact Environmental	Date Collected:	8/11/2009
Project:	Little Tor Road	Date Received:	8/12/2009
Client Sample ID:	SP-1(6-7)	SDG No.:	A3899
Lab Sample ID:	A3899-03	Matrix:	SOIL
% Solids:	88.50		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
COD	526.28		28.20	mg/Kg	1	8/13/2009	SM5220 D COD
TOC	667.00		250.00	mg/Kg	1	8/14/2009	9060 TOC

Comment

Initial and Continuing Calibration Blank Summary**Client:** Impact Environmental**SDG No.:** A3899**Project:**

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: ICB1						
COD	mg/L	< 5.00	+/- 5.00	U	5.00	8/13/2009
TOC	mg/L	< 0.40	+/- 0.40	U	0.40	8/14/2009
Sample ID: CCB1						
COD	mg/L	< 5.00	+/- 5.00	U	5.00	8/13/2009
TOC	mg/L	< 0.40	+/- 0.40	U	0.40	8/14/2009
Sample ID: CCB2						
COD	mg/L	< 5.00	+/- 5.00	U	5.00	8/13/2009
TOC	mg/L	< 0.40	+/- 0.40	U	0.40	8/14/2009
Sample ID: CCB3						
TOC	mg/L	< 0.40	+/- 0.40	U	0.40	8/14/2009

Preparation Blank Summary

Client: Impact Environmental**SDG No.:** A3899**Project:**

Analyte	Units	Result	Acceptance Limits	Conc Qual	RDL	Analysis Date
Sample ID: MBS						
COD	mg/Kg	< 25.00	+/- 25.00	U	25.00	8/13/2009
TOC	mg/Kg	< 250.00	+/- 250.00	U	250.00	8/14/2009



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Matrix Spike Summary

Client: Impact Environmental

SDG No.: A3899

Project:

Sample ID: A3899-03

Client ID: SP-1(6-7)MS

Percent Solids for Spike Sample: 88.5

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	Dilution Factor	% Rec	Qual	Date Analyzed
COD	mg/Kg	75 - 125	1396.34		526.28		1129.94	1	77.00		8/13/2009
TOC	mg/Kg	75 - 125	2646.00		667.00		2000.00	1	98.95		8/14/2009



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Duplicate Sample Summary

Client: Impact Environmental

SDG No.: A3899

Project:

Sample ID: A3899-03

Client ID: SP-1(6-7)D

Percent Solids for Spike Sample: 88.5

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	Dilution Factor	RPD/ AD	Qual	Date Analyzed
COD	mg/Kg	+/- 20	526.28		447.15		1	16.26		8/13/2009
TOC	mg/Kg	+/- 20	667.00		674.00		1	1.04		8/14/2009



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Laboratory Control Sample Summary

Client: Impact Environmental

SDG No.: A3899

Project:

Sample ID	Units	True Value	Result	C	% Recovery	Dilution Factor	Acceptance Limit %R	Date Analyzed
Analyte								
LCSS								
COD	mg/Kg	1000.0	20500.0		102.41	1	80-120	8/13/2009
TOC	mg/Kg	2000.0	2110.00		105.5	1	80-120	8/14/2009