

Operation, Maintenance and Monitoring Report First Quarter - 2009

**Fort Edward Landfill
Site 5-58-001**

**Work Assignment No.
D004445-19**

Prepared for:

SUPERFUND STANDBY PROGRAM
New York State
Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Prepared by:

Earth Tech Northeast, Inc.
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April 2009

Earth Tech AECOM

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April 27, 2009

Mr. Payson Long
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7013

Subject: **Fort Edward Landfill
NYSDEC Site #5-58-001
Work Assignment D004445-19
Quarterly O&M Report: First Quarter - 2009**

Dear Mr. Long:

On June 19 2007, Earth Tech Northeast (Earth Tech) assumed responsibility for the operation and maintenance (O&M) of the groundwater remedial system at the subject site, under New York State Department of Environmental Conservation (NYSDEC) work assignment (WA) D004445-19. This letter constitutes the seventh quarterly report regarding operations, maintenance and discharge water quality at the facility. The report describes activities during the months of January, February and March of 2009.

The remedial system has been operating without any problems, although not at full capacity, as of the most recent system inspection on April 17th. Only one of three extraction wells (W-1) is online. The remaining extraction wells cannot be brought online until upgrades are made to the control system. Earth Tech has begun an engineering evaluation of the groundwater collection and treatment system (GWCTS) that will lead to recommendations for process and control improvements.

Sampling Results

Earth Tech conducted monthly sampling of influent and effluent water on January 6, February 12 and March 12, 2009. The samples were submitted to Mitkem Laboratories in Warwick, RI for analysis. Effluent samples were analyzed by EPA Method OLM 4.3 for volatile organic compounds (VOCs), SW 8082 (modified) for polychlorinated biphenyls (PCBs), ILM 4.1 (+ mercury) for metals, SM2540 for total dissolved solids (TDS) and total suspended solids (TSS), and SM5530 for phenolics. PCB analysis of system effluent is performed on a once-per-quarter basis (the February sample this quarter), as required in the Effluent Limitations and Monitoring Requirements (ELMR). Influent samples were analyzed for metals and VOCs only. Analytical results for all Earth Tech sampling events are summarized on the attached tables. The laboratory analytical reports for the current quarter are also attached.

As shown on Figure 1, the aggregate concentrations of reported VOCs in the influent samples appear to have settled in a range of nearly non-detect to roughly 300 ug/L since July 2008. TVOC concentrations exhibited much wider fluctuations in the preceeding 11 months. In the current quarter, January

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concentrations were highest at 309 ug/L while February was lowest at 72 ug/L. In the 20 monthly influent samples Earth Tech has collected, the highest total VOC concentration was 1,849 ug/L (May 2008); the lowest were the three samples in which no VOCs were detected. The variability of reported VOCs may be related to the relative proportions of collection-trench groundwater and extraction-well groundwater in the force-main entering the treatment plant. The extraction well is subject to drawdown and recovery periods, resulting in intermittent contributions to the influent stream. No flow meters exist on the treatment system, so inflows from the collection trench cannot be compared to inflows from the extraction well. Moreover, samples cannot be drawn from individual influent streams for chemical analysis.

Figure 2 shows that, with two exceptions, monthly concentrations of iron in system influent have fallen in the range of roughly 15,000 ug/L to 50,000 ug/L. Iron concentrations in the three influent samples collected this quarter ranged from 13,400 to 136,000 ug/L. Effluent iron concentrations have been much more variable during the past 20 months, with a nearly 300-fold range between the lowest value (123 ug/L) and the highest (35,600 ug/L). Part of the variability can be accounted for by the location where the “effluent” samples have been collected. Because of high water levels in the feeder canal, effluent samples have occasionally been collected from the inflow pipe to the effluent collection pond (these occasions are footnoted on the effluent tables). Iron concentrations in true effluent samples are usually much lower than samples collected prior to the final phase of treatment in the effluent collection pond. The six samples yielding the results on Figure 2 that fall on or above the 10,000 ug/L level were collected at the pond inlet rather than at the feeder canal. Iron reductions in the seven samples collected at the pond inlet averaged 74%. The comparable figure for the 13 samples collected at the feeder canal was 95%, demonstrating the benefit of passive treatment in the effluent collection pond.

Concentrations of iron in system effluent this quarter ranged from 410 to 2,260 ug/L. Observed monthly iron reductions were approximately 100%, 97%, and 83%.

The effluent samples met all limitations for VOCs, TDS, TSS, phenolics, pH and PCBs. Exceedances of the 300 ug/L ELMR for iron were reported for all three monthly samples. Please refer to the attached table for summarized analytical results and ELMR concentrations.

System Maintenance

The following is an activity summary for the system inspection and maintenance visits performed during the reporting period.

January 6, 2009 – Flushed the four holding tank discharge pumps (P-201 through P-204) and associated piping. Collected monthly influent and effluent samples. Performed confined-space entry to inspect pump in collection-trench sump to ensure it is working; high water levels had been observed in the sump. Three pumps were used to draw the water level down before entry could be made. Inspection verified proper pump operation and heavy inflows to the sump from the two legs of the collection trench.

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January 20 – Flushed the four holding tank discharge pumps and associated piping. Brought 3500-watt generator to the site at NYSDEC's request.

January 23 – Remote monitoring indicated high water levels in the treatment building holding tank. Technician visually confirmed that there was no overflow.

January 28 – Cleaned all four holding tank discharge pumps. Piping and valve linking pumps and holding tank received the same treatment to remove iron/biological fouling.

February 12 – Flushed holding tank discharge pumps and associated piping. Collected influent and effluent samples (quarterly event).

February 13 – Remote monitoring indicated high water levels in the treatment building holding tank. Technicians found that discharge pumps were not running. All pump breakers were reset and a fuse was replaced for pump P-203. All pumps ran properly after reset.

February 19 – Installed new indoor/outdoor min/max thermometer. Inspected pump in collection-trench sump to ensure it is working; remote monitoring showed unusually low holding tank water levels although the discharge pumps hadn't been running. Disassembled piping and manually measured flow entering building; found it to be 7 gpm. Inspections and measurements showed that the holding tank water level was low because water is flowing by gravity to treatment cells no. 2 and 3. Cell no. 1 lies at a higher elevation than the holding tank, and receives water only when the discharge pumps turn on.

February 26 – Flushed the holding tank discharge pumps and associated piping. Replaced fuse for pump P-204.

March 12 – Flushed the holding tank discharge pumps and associated piping. Collected monthly influent and effluent samples. Observed quantity of discharge to effluent collection pond and determined that effluent collection sump pump was not operating at capacity. NYSDEC onsite to remove 3500-watt generator.

March 24 – Response to observation on March 12 regarding effluent collection sump pump. Removed pump for inspection and noted the casing was cracked. The pump was taken to Pump Service and Supply in Troy for inspection and repair estimate.

March 26, 2009 - Flushed the holding tank discharge pumps and associated piping.

Mr. Payson Long
NYSDEC
April 27, 2009

If you have any questions about this report, please call me at (518) 951-2262, or contact me by email at stephen.choiniere@aecom.com.

Very truly yours,
Earth Tech Northeast, Inc.



Stephen R. Choiniere
Project Manager

FIGURE 1
FORT EDWARD LANDFILL
SITE # 5-58-001
GROUNDWATER COLLECTION and TREATMENT SYSTEM
INFLUENT: TOTAL VOCs CONCENTRATION

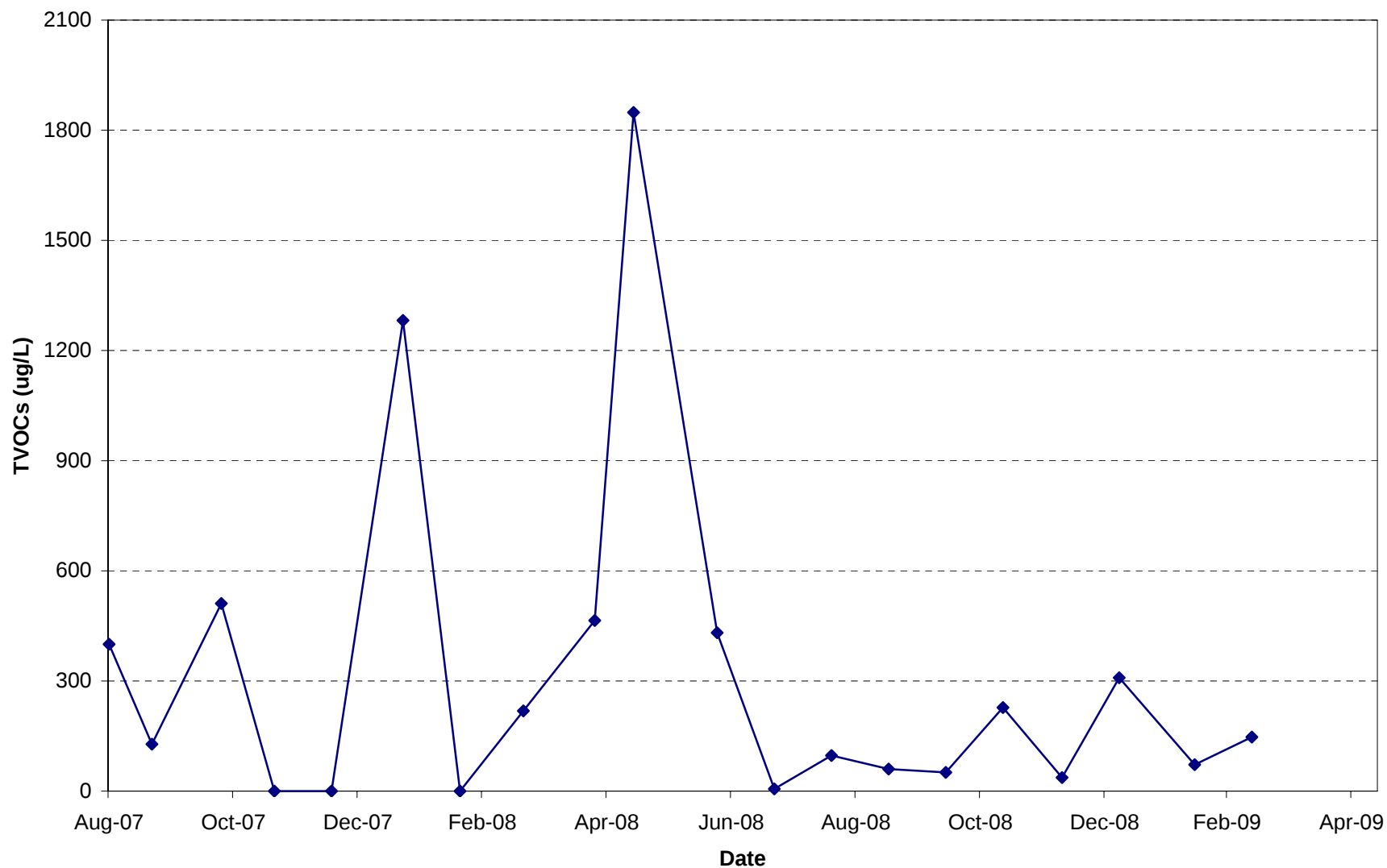
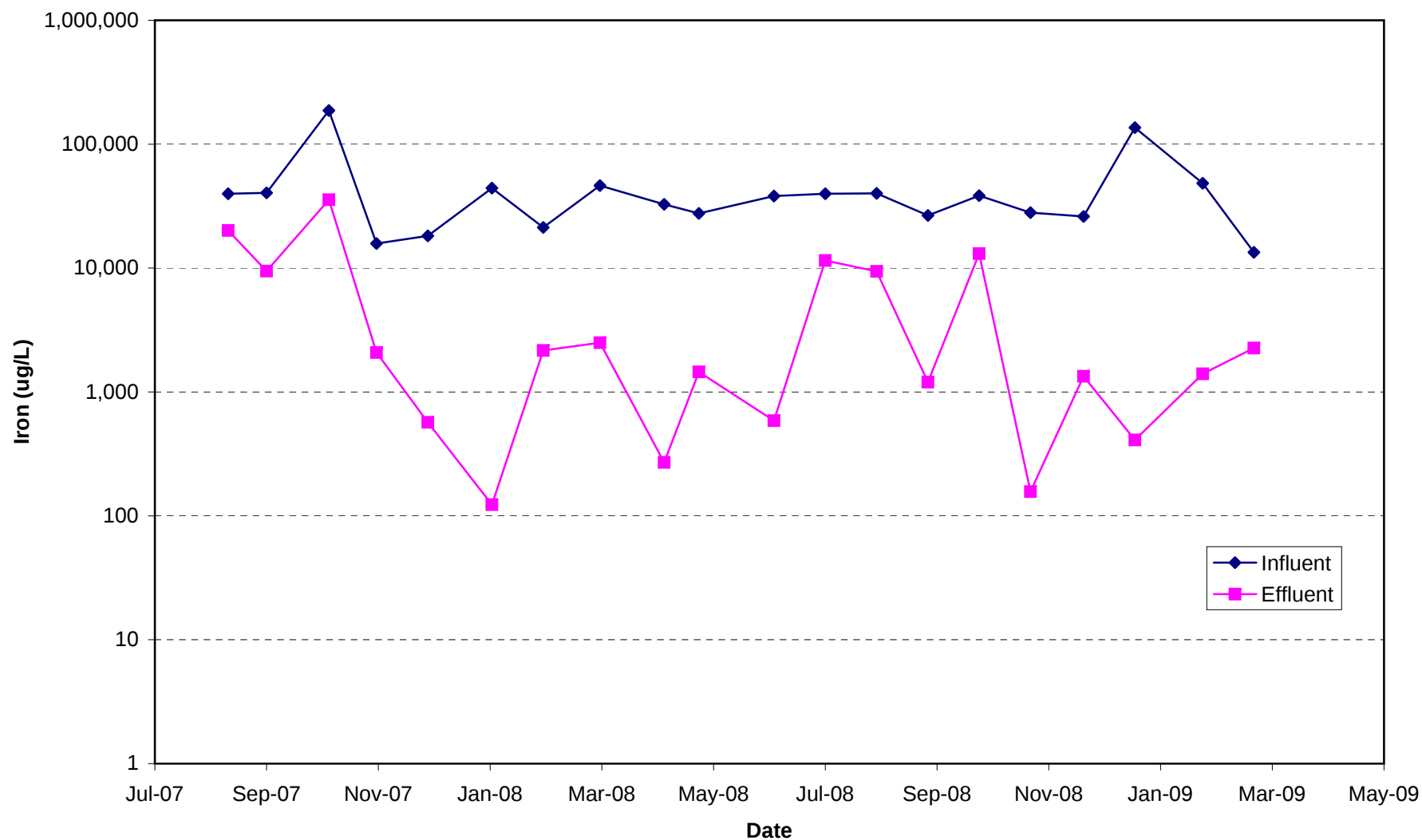


FIGURE 2
FORT EDWARD LANDFILL
SITE # 5-58-001
GROUNDWATER COLLECTION and TREATMENT SYSTEM
IRON CONCENTRATIONS



FORT EDWARD LANDFILL
SITE #: 5-58-001
MONTHLY PERFORMANCE MONITORING
INFLUENT RESULTS

Analyte	Units	INFLUENT- 2009										
		1/6/09	2/12/09	3/12/09								
Vinyl Chloride	ug/L	150	26	56								
1,1-Dichloroethene	"											
trans-1,2-Dichloroethene	"											
cis-1,2-Dichloroethene	"	150	46	87								
Benzene	"	3.7 J		2.2 J								
Toluene	"											
Chlorobenzene	"	2.6 J		2.1 J								
Ethylbenzene	"											
Xylene (total)	"	2.6 J										
Isopropylbenzene	"											
Total VOCs		308.9	72	147.3								
Arsenic	"	89.5	8.3 B									
Barium	"	255	89.1 B	69.4 B								
Cadmium	"	2.1 B		0.35 B								
Chromium	"	0.64 B	0.21 B	1.1 B								
Cobalt	"	2.5 B	3.4 B	4.9 B								
Copper	"		5.0 B	1.6 B								
Iron	"	136,000	48,300	13,400								
Lead	"			2.7 B								
Mercury	"		0.79	0.016 B								
Nickel	"	5.3 B	4.0 B	5.6 B								
Vanadium	"	1.0 B	0.61 B	1.7 B								
Zinc	"	14.2 B	12.1 B	17.4 B								
NOTES: Data are shown only for detected VOCs, and for metals subject to effluent limitations. Analysis by EPA Method OLM 4.3 for volatile organics, and ILM 4.1 (+ mercury) for metals. Blank cell = the compound/metal was analyzed for, but not detected in that sampling event D - Analysis performed on diluted sample. J - Estimated concentration. B - Indicates a "trace" concentration below the reporting limit, and equal to or above the detection limit for the metal. E - indicates an estimated concentration due to the presence of interferences, as determined by serial dilution analysis.												

FORT EDWARD LANDFILL
SITE #: 5-58-001
MONTHLY PERFORMANCE MONITORING
EFFLUENT RESULTS

Analyte	Units	EFFLUENT - 2009											Discharge Limit
		1/6/09	2/12/09	3/12/09									
Vinyl Chloride	ug/L	<10	<10	<10									50
Chloroethane	"	<10	<10	<10									20
Methylene Chloride	"	<10	<10	<10									50
1,1-Dichloroethane	"	<10	<10	<10									30
1,2-Dichloroethene (Total)	"	<10	<10	<10									30
Chloroform	"	<10	<10	<10									150
Bromodichloromethane	"	<10	<10	<10									30
Benzene	"	<10	<10	<10									10
Toluene	"	<10	<10	<10									10
Chlorobenzene	"	<10	<10	<10									10
Ethylbenzene	"	<10	<10	<10									10
Xylenes, Total	"	<10	<10	<10									10
Phenols, Total Phenolics	mg/L	<0.20	<0.20	0.51									Monitor
PCB, Aroclor 1016	ug/L	NA	<0.050	NA									0.065
PCB, Aroclor 1221	"	NA	<0.050	NA									0.065
PCB, Aroclor 1242	"	NA	<0.050	NA									0.065
pH	SU	7.1	7.2	6.8									6.0-9.0
Arsenic, Total	ug/L	<2.8	<3.2	<3.2									150
Barium, Total	"	43.5 B	40.9 B	30.7 B									Monitor
Cadmium, Total	"	<0.18	<0.21	<0.21									1
Chromium, Total	"	0.89 B	1.2 B	2.8 B									210
Cobalt, Total	"	0.80 B	0.90 B	1.3 B									5
Copper, Total	"	6.5 B	7.9 B	3.5 B									24
Iron, Total	"	410	1400	2260									300
Lead, Total	"	1.3 B	<1.9	2.1 B									3.2
Mercury, Total	"	0.018 B	0.061 B	<0.014									0.8
Nickel, Total	"	4.0 B	3.3 B	3.5 B									9.6 or 96
Vanadium, Total	"	0.45 B	1.8 B	3.0 B									14
Zinc, Total	"	15.2 B	27.2	35.0									170
Total Dissolved Solids	mg/L	410	340	230									500
Total Suspended Solids	"	<10	15	<10									50

NOTES:

Data are shown for all analytes for which monitoring requirements have been established. Detected concentrations are shown in **bold font**.

Concentrations exceeding discharge limitations are shown in **bold font** in a shaded cell.

Analysis by EPA Method OLM 4.3 for volatile organics, SW 8082 (modified) for PCBs, ILM 4.1 (+ mercury) for metals, SM2540 for TDS & TSS, and SM5530 for phenolics.

J & E - Each indicates an estimated concentration. **NA** - Not analyzed.

B - Indicates a "trace" concentration below the reporting limit, and equal to or above the detection limit for the metal.

FORT EDWARD LANDFILL
SITE #: 5-58-001
MONTHLY PERFORMANCE MONITORING
INFLUENT RESULTS

Analyte	Units	INFLUENT- 2007 & 2008																
		8/30/07	9/20/07	10/24/07	11/19/07	12/17/07	1/21/08	2/18/08	3/20/08	4/24/08	5/13/08	6/23/08	7/21/08	8/18/08	9/15/08	10/13/08	11/10/08	12/9/08
Vinyl Chloride	ug/L	210 D	43	170			510 D		67	180	780 D	180 D		65	42	19	100	17
1,1-Dichloroethene	"						4 J				6.9 J							
trans-1,2-Dichloroethene	"			3 J			7 J			3.1 J	11							
cis-1,2-Dichloroethene	"	190	85	310 D			690 D		140	270 D	1,000 D	240 D	5.9 J	32	18	32	120	20
Benzene	"			6 J			15		3.8 J	3.7 J	23	3.4 J					2.5 J	
Toluene	"			7 J			12											
Chlorobenzene	"			4 J			10		2.7 J	2.9 J	15	3.0 J					2.4 J	
Ethylbenzene	"						3 J				3.1 J							
Xylene (total)	"			11			27		5.1 J	4.9 J	3.9 J	4.9 J					2.7 J	
Isopropylbenzene	"						4 J				5.7 J							
Total VOCs		400	128	511			1282		218.6	464.6	1848.6	431.3	5.9	97	60	51	227.6	37
Arsenic	"		5.1 B	105					8.1 B			4.6 B	4.0 B	5.3 B	4.0 B	4.2 B	4.0 B	2.9 B
Barium	"	110 B	107 B	286	47.2 B	62.0 B	263	62.5 B	134 B	89.8 B	270	91.9 B	83.2 B	68.2 B	65.5 B	74.1 B	89.3 B	73.4 B
Cadmium	"			0.61 B		0.23 B		0.53 B				0.24 B						0.27 B
Chromium	"						1.2 B	2.3 B	0.22 B			0.45 B	0.17 B		0.25 B	0.29 B	0.63 B	
Cobalt	"	7.8 B	7.6 B	11.3 B	5.5 B	4.8 B	8.0 B	3.9 B	5.1 B	6.3 B	8.4 B	4.3 B	3.2 B	4.2 B	4.1 B	3.4 B	3.8 B	3.4 B
Copper	"		1.2 B	26.6	4.5 B	1.0 B		0.60 B	4.4 B	2.5 B	3.3 B	3.2 B			3.0 B		1.8 B	4.4 B
Iron	"	39,800	40,500	187,000	15,800	18,200	44,200	21,300	46,300	32,700	27,600	38,100	39,800	40,100	26,600	38,400	28,000	26,100
Lead	"		3.5	8.6		1.8 B	1.6 B			1.6 B		2.0 B		2.0 B		2.4 B		
Mercury	"				0.062 B		0.086 B				0.084 B							
Nickel	"	4.9 B	7.3 B	11.4 B	4.4 B	5.6 B	17.5 B	5.2 B	6.8 B	6.6 B	23.5 B	5.1 B	2.8 B	1.9 B	4.0 B	4.3 B	5.2 B	3.5 B
Vanadium	"	0.81 B	1.8 B	14.0 B	1.6 B	1.2 B	4.7 B	0.96 B		1.0 B	1.8 B				1.1 B	1.6 B	1.2 B	
Zinc	"	3.5 B	1.0 B	7.6 B	6.7 B	2.2 B	0.74 B	6.5 B	6.2 B	4.5 B	8.5 B	12.0 B	9.9 B	11.3 B	15.2 B	15.7 B E	9.0 B	7.6 B

NOTES:

Data are shown only for detected VOCs, and for metals subject to effluent limitations. **Blank cell** = the compound/metal was analyzed for, but not detected in that sampling event

Analysis by EPA Method OLM 4.3 for volatile organics, and ILM 4.1 (+ mercury) for metals.

D - Analysis performed on diluted sample.

J - Estimated concentration.

B - Indicates a "trace" concentration below the reporting limit, and equal to or above the detection limit for the metal.

E - indicates an estimated concentration due to the presence of interferences, as determined by serial dilution analysis.

FORT EDWARD LANDFILL
SITE #: 5-58-001
MONTHLY PERFORMANCE MONITORING
EFFLUENT RESULTS

Analyte	Units	EFFLUENT - 2007 & 2008																	
		8/30/07	9/20/07	10/24/07	11/19/07	12/17/07	1/21/08	2/18/08	3/20/08	4/24/08	5/13/08	6/23/08	7/21/08	8/18/08	9/15/08	10/13/08	11/10/08	12/9/08	Discharge Limit
Vinyl Chloride	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	50
Chloroethane	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	20
Methylene Chloride	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	50
1,1-Dichloroethane	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	30
1,2-Dichloroethene (Total)	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	30
Chloroform	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	150
Bromodichloromethane	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	30
Benzene	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10
Toluene	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10
Chlorobenzene	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10
Ethylbenzene	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10
Xylenes, Total	"	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10
Phenols, Total Phenolics	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	Monitor
PCB, Aroclor 1016	ug/L	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	0.065
PCB, Aroclor 1221	"	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	0.065
PCB, Aroclor 1242	"	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	NA	<0.050	NA	0.065
pH	SU	NA	NA	NA	7.1	NA	7.5	7	7.4	7	NA	6.9	7.2	6.7	6.9	7.45	7.3	7.3	6.0-9.0
Arsenic, Total	ug/L	<4.6	<4.6	15.5	<2.9	<2.9	<2.8	<2.8	<2.8	<2.8	<3.3	<2.5	7.9 B	6.8 B	<2.5	2.7 B	<2.8	<2.8	150
Barium, Total	"	88.1 B	59.2 B	141 B	45.2 B	60.6 B	33.5 B	44.7 B	38.4 B	29.0 B	40.1	27.7 B	86.2 B	78.7 B	39.3 B	69.9 B	24.7 B	56.4 B	Monitor
Cadmium, Total	"	<0.10	<0.10	<0.20	<0.20	<0.20	<0.16	<0.16	<0.16	<0.16	<0.08	<0.13	<0.13	<0.050	<0.22	<0.22	<0.18	0.26 B	1
Chromium, Total	"	0.38 B	<0.20	0.68 B	<0.30	<0.30	<0.15	0.70 B	2.9 B	0.23 B	<0.44	0.79 B	1.1 B	0.86 B	0.67 B	0.51 B	<0.25	0.77 B	210
Cobalt, Total	"	6.7 B	4.0 B	3.7 B	2.0 B	1.6 B	0.73 B	0.97 B	1.4 B	1.6 B	1.3 B	0.65 B	1.2 B	2.5 B	2.9 B	0.67 B	0.46 B	1.4 B	5
Copper, Total	"	5.0 B	6.0 B	11.7 B	4.9 B	7.3 B	7.3 B	3.6 B	10.0 B	4.4 B	16.7 B	5.3 B	24.9 B	5.2 B	10 B	2.7 B	3.5 B	5.6 B	24
Iron, Total	"	20,100	9,460	35,600	2,080	569	123	2,160	2,500	270	1,450	586	11,500	9,420	1,200	13,100	157	1,340	300
Lead, Total	"	1.3 B	4.0	9.4	<1.1	1.2 B	<1.4	<1.4	1.8 B	1.9 B	1.6 B	1.8 B	6.9	3.5	<2.0	<2.0	1.6 B	<1.2	3.2
Mercury, Total	"	<0.010	<0.010	<0.010	0.075 B	<0.020	0.088 B	<0.040	<0.040	<0.040	0.092 B	<0.06	<0.060	<0.040	<0.040	<0.040	<0.010	<0.010	0.8
Nickel, Total	"	6.0 B	6.0 B	7.7 B	4.2 B	6.0 B	3.3 B	3.4 B	3.2 B	3.2 B	2.7 B	3.4 B	3.2 B	3.7 B	4.6 B	4.1 B	2.5 B	3.5 B	9.6 or 96
Vanadium, Total	"	4.1 B	1.5 B	7.6 B	2.7 B	1.6 B	<0.43	1.4 B	3.3 B	<0.43	0.52 B	0.85 B	2.9 B	<4.4	1.3 B	1.4 B	0.43 B	0.44 B	14
Zinc, Total	"	29.0	12.3 B	39.8 E	20 B	23.7	7.9 B	8.6 B	16.2 B	11.5 B	27.7	22.2	45.6	25.9	20.4	16 B E	6.4 B	14.3 B	170
Total Dissolved Solids	mg/L	620	600	520	370	430	320	220	170	310	380	360	410	370	860	500	380	450	500
Total Suspended Solids	"	100	46	78	<10	<10	<10	<10	<10	<10	<10	<10	<10	18	<10	28	32	<10	50

NOTES:

August, September, October 2007 & May, July, August and October 2008 effluent samples were collected prior to treatment in effluent collection pond.

Data are shown for all analytes for which monitoring requirements have been established. Detected concentrations are shown in bold font.

Concentrations exceeding discharge limitations are shown in bold font in a shaded cell.

Analysis by EPA Method OLM 4.3 for volatile organics, SW 8082 (modified) for PCBs, ILM 4.1 (+ mercury) for metals, SM2540 for TDS & TSS, and SM5530 for phenolics.

J & E - Each indicates an estimated concentration. NA - Not analyzed.

B - Indicates a "trace" concentration below the reporting limit, and equal to or above the detection limit for the metal.



A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

January 26, 2009

Earth Tech | AECOM
40 British American Boulevard
Latham, NY 12110
Attn: Mr. Stephen Choiniere

RE: Client Project: Fort Edward Landfill, Reference Number: 99163.02
Lab Project #: H0013

Dear Mr. Choiniere:

Enclosed please find the data report for the analyses of samples associated with the above referenced project.

If you have any questions, please do not hesitate to call me.

We appreciate your business.

Sincerely,


Shirley S. Ng
Project Manager

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0013

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
FELF-EFF	H0013-01	OLM4.2_VOA_W			ILM4.1_HG_W	SEE DATA
FELF-EFF	H0013-01				ILM4.1_ICP_W	
FELF-INF	H0013-02	OLM4.2_VOA_W			ILM4.1_HG_W	
FELF-INF	H0013-02				ILM4.1_ICP_W	
TRIP BLANK	H0013-03	OLM4.2_VOA_W				

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0013

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
OLM4.2_VOA_W					
H0013-01A	AQ	1/6/2009	1/7/2009	NA	1/12/2009
H0013-02A	AQ	1/6/2009	1/7/2009	NA	1/12/2009
H0013-03A	AQ	1/6/2009	1/7/2009	NA	1/12/2009

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0013

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
OLM4.2_VOA_W					
H0013-01A	AQ	OLM4.2_VOA_W	NA	LOW	1
H0013-02A	AQ	OLM4.2_VOA_W	NA	LOW	1
H0013-03A	AQ	OLM4.2_VOA_W	NA	LOW	1

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0013

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
ILM4.1_HG_W				
H0013-01C	AQ	ILM4.1_HG_W	1/7/2009	1/12/2009
H0013-02B	AQ	ILM4.1_HG_W	1/7/2009	1/12/2009
H0013-02BDUP	AQ	ILM4.1_HG_W	1/7/2009	1/12/2009
H0013-02BMS	AQ	ILM4.1_HG_W	1/7/2009	1/12/2009
ILM4.1_ICP_W				
H0013-01C	AQ	ILM4.1_ICP_W	1/7/2009	1/16/2009
H0013-01CDUP	AQ	ILM4.1_ICP_W	1/7/2009	1/14/2009
H0013-01CMS	AQ	ILM4.1_ICP_W	1/7/2009	1/14/2009
H0013-02B	AQ	ILM4.1_ICP_W	1/7/2009	1/16/2009

Analytical Data Package for Earth Tech

Client Project: Fort Edward Landfill

SDG# SH0013

Mitkem Work Order ID: H0013

January 26, 2009

Prepared For: Earth Tech | AECOM
40 British American Boulevard
Latham, NY 12110
Attn: Mr. Stephen Choiniere

Prepared By: Mitkem Laboratories
175 Metro Center Boulevard
Warwick, RI 02886
(401) 732-3400

SDG Narrative

Mitkem Laboratories submits the enclosed data package in response to Earth Tech's Fort Edward Landfill project. Under this deliverable, analysis results are presented for three aqueous samples that were received on January 7, 2009. Analyses were performed per specifications in the project's contract and the chain of custody form. Following the narrative is the Mitkem Work Order for cross-referencing client sample ID and laboratory sample ID.

The analyses were performed according to NYSDEC ASP protocols and reported per NYSDEC ASP requirement for Category A deliverable.

The following observation and/or deviations are observed for the following analyses:

1. Overall Observation:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting.
- M2 peak co-elution.
- M3 rising or falling baseline.
- M4 retention time shift.
- M5 miscellaneous – under this category, the justification is explained.
- M6 software did not integrate peak
- M7 partial peak integration

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. The originals of initial calibrations that are shared among several cases are maintained on file at the laboratory, with photocopies included in the data package.

2. OLM 4.3 Volatile Analysis:

Trap used for instrument V2: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

Samples were preserved with hydrochloric acid with pH<2.

Surrogate recovery: recoveries were within the QC limits.

Lab control sample: spike recoveries were within the QC limits.

Sample analysis: no unusual observation was made for the analysis.

3. ILM 4.1 Metals Analysis:

All elements were analyzed using either a Perkin Elmer Model 3100XL Optima or a Perkin Elmer Model 4300DV ICAP.

Samples were preserved with nitric acid with pH<2.

Lab control sample: spike recoveries were within the QC limits.

Matrix spike analysis: matrix spike was performed on sample FELF-INF for mercury and on sample FELF-EFF for ICP analysis except for arsenic, lead, selenium, thallium, and cadmium. Spike recoveries were within the QC.

Duplicate analysis: lab duplicate was performed on sample FELF-INF for mercury and on sample FELF-EFF for ICP analysis except arsenic, lead, selenium, thallium, and cadmium. Replicate RPDs were within the QC limits.

Sample analysis: serial dilution was performed on sample FELF-EFF for ICP analysis except arsenic, lead, selenium, thallium and cadmium. Serial dilution was performed on sample FELF-INF for arsenic, lead, selenium, thallium and cadmium. Percent differences were within the QC limits. No other unusual observations were made during sample analysis.

4. Wet Chemistry Analysis:

Lab control sample: spike recoveries were within the QC limits.

Matrix spike analysis: matrix spike was performed on sample FELF-EFF for phenol analysis. Spike recovery was outside the QC limits. A post digestion spike was performed and reported.

Duplicate analysis: duplicate analysis was performed on sample FELF-EFF for phenol analysis. Percent RPD was within the QC limits.

Sample analysis: no unusual observation was made for this analysis.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

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


Shirley Ng
Project Manager
01/26/09

Sample Transmittal Documentation

Mitekem Laboratories

26/Jan/09 16:09

WorkOrder: H0013

Client ID: EARTH_NY

Project: Fort Edward Landfill

Location:

PO: 99163.04

Case:

SDG:

HC Due: 01/28/09

Fax Due: 01/21/09

Report Level: ASP-A

EDD:

Comments: under contract D004445-18-19-20-21-MIT-01

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL	Storage
H0013-01A	FELF-EFF	01/06/2009 9:50	01/07/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA
H0013-01B	FELF-EFF	01/06/2009 9:50	01/07/2009	Aqueous	SM5530_W		☐	☐	☐	F3
H0013-01C	FELF-EFF	01/06/2009 9:50	01/07/2009	Aqueous	ILM4.1_HG_W	ILM	☐	☐	☐	M1
					ILM4.1_ICP_W	ILM	☐	☐	☒	M1
H0013-01D	FELF-EFF	01/06/2009 9:50	01/07/2009	Aqueous	SM2540_TDS		☐	☐	☐	F3
					SM2540_TSS		☐	☐	☐	F3
H0013-02A	FELF-INF	01/06/2009 10:20	01/07/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA
H0013-02B	FELF-INF	01/06/2009 10:20	01/07/2009	Aqueous	ILM4.1_HG_W	ILM	☐	☐	☐	M1
					ILM4.1_ICP_W	ILM	☐	☐	☒	M1
H0013-03A	TRIP BLANK	01/06/2009 0:00	01/07/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA

Client Rep: Shirley S Ng

Page 1 of 1



A DIVISION OF SPECTRUM ANALYTICAL, INC. FEATURING HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- ☒ Standard TAT - 10 to 15 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval. Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: AECOM Environmental
40 British American Blvd
Latham, NY 12110

Invoice To: Samc

P.O. No.: _____ RQN: _____

Project No.: 99163-02
Site Name: Ft. Edward LF
Location: Fort Edward State: NY
Sampler(s): RKV

1= $\text{Na}_2\text{S}_2\text{O}_3$ 2= HCl 3= H_2SO_4 4= HNO_3 5= NaOH 6=Ascorbic Acid
7= CH_3OH 8= NaHSO_4 9=None 10=_____

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:
H0013-01	FELF-EFF	1/6/09	9:50
H0013-02	FELF-INF	1/6/09	10:20
H0013-03	Trip Blank	—	—

Matrix

Type

Preservative

Containers:

Analyses:

QA Reporting Notes:
(check if needed)

- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DEP RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____

State specific reporting standards: _____

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

OLM 4.2 VOA

Phenols

ILM 4.1

TDS/TSS

☐ Fax results when available to () _____

☐ E-mail to _____

EDD Format _____

Condition upon receipt: ☒ Ice ☐ Ambient ☐ C 4

Relinquished by: RLW

Received by: CP Johnson

Date: 1/6/09

Time: 1:00pm

MITKEM LABORATORIES

Sample Condition Form

Page 1 of 1

Received By: <u>C. Au</u>		Reviewed By: <u>SN</u>		Date: <u>1/10/09</u>		MITKEM Workorder #: <u>H0013</u>			
Client Project: <u>Ft Edward LF</u>				Client: <u>AECOM</u>			Soil Headspace or Air Bubbles ≥ 1/4"		
		Lab Sample ID		Preservation (pH)					VOA Matrix
				HNO ₃	H ₂ SO ₄	HCl	NaOH	H ₃ PO ₄	
1) Cooler Sealed <u>Yes</u> / No		<u>H0013 01</u>		<u><2</u>					<u>H</u>
		<u>H0013 02</u>		<u><2</u>					<u>H</u>
2) Custody Seal(s) <u>Present</u> / Absent		<u>H0013 03</u>							<u>H</u>
<u>Coolers</u> / Bottles									
<u>Intact</u> / Broken									
3) Custody Seal Number(s) <u>NA</u>									
4) Chain-of-Custody <u>Present</u> / Absent									
5) Cooler Temperature <u>4°C</u>									
Coolant Condition <u>Ice</u>									
6) Airbill(s) <u>Present</u> / Absent									
Airbill Number(s) <u>Fed Ex</u>									
<u>805899022942</u>									
7) Sample Bottles <u>Intact</u> / Broken/Leaking									
8) Date Received <u>1/7/09</u>									
9) Time Received <u>8:15</u>									
Preservative Name/Lot No:									

VOA Matrix Key:

US = Unpreserved Soil	A = Air
UA = Unpreserved Aqu.	H = HCl
M = MeOH	E = Encore
N = NaHSO ₄	F = Freeze

See Sample Condition Notification/Corrective Action Form yes / no

Rad OK yes/ no



* Volant *

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

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0013-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6134.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

EPA OLM

0010

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

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0013-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6134.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U

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

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0013-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6135.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		150	
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		150	
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		3.7	J
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0012

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

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0013-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6135.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	2.6	J
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	2.6	J
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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

CLIENT SAMPLE NO.
TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0013-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6136.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

EPA OLM

0014

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0013-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6136.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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

CLIENT SAMPLE NO.

VA2LCS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-41226
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6133.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	52	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	50	
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	50	
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

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0016

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

CLIENT SAMPLE NO.

VA2LCS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-41226
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6133.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	53	
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES

Contract: _____

Lab Code: MITKEM

Case No.: _____

Mod. Ref No.: _____

SDG No.: SH0013

Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (TOL) #	VDMC2 (BFB) #	VDMC3 (DCE) #					TOT OUT
01	VBLKA2	100	93	100					0
02	VA2LCS	98	90	100					0
03	FELF-EFF	98	90	100					0
04	FELF-INF	96	87	100					0
05	TRIP BLANK	100	91	103					0
06	VHBLKA2	103	91	103					0

QC LIMITS

VDMC1 (TOL) = Toluene-d8

(88-110)

VDMC2 (BFB) = Bromofluorobenzene

(86-115)

VDMC3 (DCE) = 1,2-Dichloroethane-d4

(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

VA2LCS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Lab Sample ID: LCS-41226 LCS Lot No.: _____
Date Extracted: 01/12/2009 Date Analyzed (1): 01/12/2009

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	50.0000	0.0000	52.0006	104		61 - 145
Benzene	50.0000	0.0000	49.9496	100		76 - 127
Trichloroethene	50.0000	0.0000	49.7388	99		71 - 120
Toluene	50.0000	0.0000	50.3357	101		76 - 125
Chlorobenzene	50.0000	0.0000	53.3770	107		75 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKA2

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Lab File ID: V2K6132.D Lab Sample ID: MB-41226
Instrument ID: V2
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 01/12/2009
Level: (TRACE or LOW/MED) LOW Time Analyzed: 10:45
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VA2LCS	LCS-41226	V2K6133.D	11:11
02	FELF-EFF	H0013-01A	V2K6134.D	11:35
03	FELF-INF	H0013-02A	V2K6135.D	12:01
04	TRIP BLANK	H0013-03A	V2K6136.D	12:27
05	VHBLKA2	VHBLKA2	V2K6140.D	14:08

COMMENTS: _____

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

CLIENT SAMPLE NO.

VLKA2

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-41226
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6132.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

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0021

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

CLIENT SAMPLE NO.

VBLKA2

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-41226
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6132.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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

CLIENT SAMPLE NO.

VHBLKA2

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKA2
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6140.D
Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
% Moisture: not dec. Date Analyzed: 01/12/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

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0023

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

CLIENT SAMPLE NO.

VHBLKA2

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: SH0013
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKA2
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V2K6140.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/07/2009
 % Moisture: not dec. _____ Date Analyzed: 01/12/2009
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U



* Metals *

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

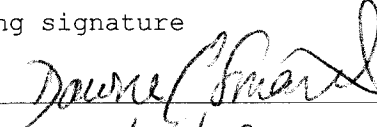
Lab Name: Mitkem Laboratories Contract: 99163.04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SH0013
SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID
<u>FELF-EFF</u>	<u>H0013-01</u>
<u>FELF-EFFD</u>	<u>H0013-01DUP</u>
<u>FELF-EFFS</u>	<u>H0013-01MS</u>
<u>FELF-INF</u>	<u>H0013-02</u>
<u>FELF-INF D</u>	<u>H0013-02DUP</u>
<u>FELF-INFS</u>	<u>H0013-02MS</u>

Were ICP interelement corrections applied?	Yes/No	<u>YES</u>
Were background corrections applied?	Yes/No	<u>YES</u>
If yes-were raw data generated before application of background corrections?	Yes/No	<u>NO</u>

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature:  Name: Dawn E. Smart
Date: 1/26/09 Title: _____

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ILM04.1

0025

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1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FELF-EFF

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0013Matrix (soil/water): WATERLab Sample ID: H0013-01Level (low/med): MEDDate Received: 01/07/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	54.9	B		P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	43.5	B		P
7440-41-7	Beryllium	0.050	U		P
7440-43-9	Cadmium	0.18	U		P
7440-70-2	Calcium	89200			P
7440-47-3	Chromium	0.89	B		P
7440-48-4	Cobalt	0.80	B		P
7440-50-8	Copper	6.5	B		P
7439-89-6	Iron	410			P
7439-92-1	Lead	1.3	B		P
7439-95-4	Magnesium	26300			P
7439-96-5	Manganese	29.2			P
7439-97-6	Mercury	0.018	B		CV
7440-02-0	Nickel	4.0	B		P
7440-09-7	Potassium	6850			P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	0.45	U		P
7440-23-5	Sodium	33100			P
7440-28-0	Thallium	3.3	U		P
7440-62-2	Vanadium	0.45	B		P
7440-66-6	Zinc	15.2	B		P

Color Before COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments: _____

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1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FELF-INF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Matrix (soil/water): WATER

Lab Sample ID: H0013-02

Level (low/med): MED

Date Received: 01/07/2009

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25.1	B		P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	89.5			P
7440-39-3	Barium	255			P
7440-41-7	Beryllium	0.050	U		P
7440-43-9	Cadmium	2.1	B		P
7440-70-2	Calcium	127000			P
7440-47-3	Chromium	0.64	B		P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	0.65	U		P
7439-89-6	Iron	136000			P
7439-92-1	Lead	1.2	U		P
7439-95-4	Magnesium	31400			P
7439-96-5	Manganese	2700			P
7439-97-6	Mercury	0.010	U		CV
7440-02-0	Nickel	5.3	B		P
7440-09-7	Potassium	8360			P
7782-49-2	Selenium	48.8			P
7440-22-4	Silver	0.45	U		P
7440-23-5	Sodium	63800			P
7440-28-0	Thallium	3.3	U		P
7440-62-2	Vanadium	1.0	B		P
7440-66-6	Zinc	14.2	B		P

Color Before YELLOW

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

U.S. EPA - CLP

3

BLANKS

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0013Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L**MB-41202**FIMS1_090112A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.010	U	0.010	U	0.010	U			0.010	U	

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3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-41200

OPTIMA3_090112A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Potassium	35.4	U	36.1	B	35.4	U			35.440	U	
Sodium	-231.4	B	-109.0	B	-91.3	B			-551.704	B	

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BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-41200

OPTIMA3_090114C

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C		C	
Aluminum	17.7	U	17.7	U	17.7	U	17.7	U	17.680	U			
Antimony	2.2	U	2.2	U	2.2	U	2.2	U	2.170	U			
Barium	0.5	B	0.3	U	0.3	B	0.4	B	0.818	B			
Beryllium	0.0	U	-0.1	B	-0.1	B	-0.1	B	0.050	U			
Calcium	81.0	U	81.0	U	81.0	U	81.0	U	81.000	U			
Chromium	0.2	U	0.3	U	0.3	U	0.3	U	0.389	B			
Cobalt	0.2	U	0.3	U	0.3	U	0.3	U	0.250	U			
Copper	5.8	B	3.0	B	3.8	B	2.9	B	3.745	B			
Iron	5.5	U	5.5	U	5.5	U	5.5	U	33.264	B			
Magnesium	-18.9	B	-20.1	B	-25.1	B	-16.1	B	-17.586	B			
Manganese	0.2	B	0.1	U	0.1	U	0.1	B	5.522	B			
Nickel	0.3	U	0.3	U	0.3	U	0.3	U	0.330	U			
Silver	1.2	B	0.5	U	0.5	U	0.5	U	0.450	U			
Vanadium	-0.5	B	0.3	U	0.3	U	0.3	U	-0.448	B			
Zinc	0.7	B	1.3	B	0.7	B	1.1	B	3.183	B			

U.S. EPA - CLP

3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-41329

OPTIMA3_090116A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Arsenic	2.8	U	2.8	U	2.8	U	2.8	U	2.750	U	
Cadmium	0.2	U	0.2	U	0.2	B	0.2	U	0.180	U	
Lead	1.2	U	1.2	U	1.2	U	1.2	U	1.190	U	
Selenium	-4.0	B	4.0	U	4.0	U	4.0	U	3.950	U	
Thallium	3.3	U	3.3	U	3.3	U	3.3	U	3.310	U	

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

FELF-EFFS

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0013Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2320.8348	54.8548 B	2000.00	113.3		P
Antimony	75-125	105.8517	2.1700 U	100.00	105.9		P
Barium	75-125	2411.4410	43.4936 B	2000.00	118.4		P
Beryllium	75-125	60.5055	0.0500 U	50.00	121.0		P
Chromium	75-125	248.2215	0.8902 B	200.00	123.7		P
Cobalt	75-125	594.6155	0.8000 B	500.00	118.8		P
Copper	75-125	308.2245	6.4752 B	250.00	120.7		P
Iron	75-125	1622.4173	410.2857	1000.00	121.2		P
Manganese	75-125	633.0819	29.2198	500.00	120.8		P
Nickel	75-125	594.0432	3.9597 B	500.00	118.0		P
Silver	75-125	57.1773	0.4500 U	50.00	114.4		P
Vanadium	75-125	596.2129	0.4490 B	500.00	119.2		P
Zinc	75-125	592.3589	15.1810 B	500.00	115.4		P

Comments:

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

FELF-INFS

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0013Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75-125	0.8290	0.0100 U	1.00	82.9		CV

Comments:

U.S. EPA - CLP

6

EPA SAMPLE NO.

DUPLICATES

FELF-EFFD

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		54.8548	B	48.7848	B	11.7		P
Antimony		2.1700	U	2.1700	U			P
Barium		43.4936	B	41.9620	B	3.6		P
Beryllium		0.0500	U	0.0500	U			P
Calcium		89202.2713		86577.8468		3		P
Chromium		0.8902	B	0.8102	B	9.4		P
Cobalt		0.8000	B	0.6964	B	13.8		P
Copper		6.4752	B	3.7553	B	53.2		P
Iron	100.0	410.2857		397.1517		3.3		P
Magnesium		26250.9714		25617.9516		2.4		P
Manganese	15.0	29.2198		27.9398		4.5		P
Nickel		3.9597	B	3.8481	B	2.9		P
Potassium	5000.0	6850.3436		6645.9190		3		P
Silver		0.4500	U	0.4500	U			P
Sodium		33072.4798		32170.3811		2.8		P
Vanadium		0.4490	B	0.3500	U	200		P
Zinc		15.1810	B	14.8400	B	2.3		P

U.S. EPA - CLP

6

EPA SAMPLE NO.

DUPLICATES

FELF-INFD

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM Case No.: _____

SAS No.: _____

SDG No.: SH0013Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Mercury		0.0100 U	0.0100 U			CV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0013

Solid LCS Source: _____

LCS(D) ID:

Aqueous LCS Source: _____

LCS-41200

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9021.44	99.1						
Antimony	455.0	467.40	102.7						
Barium	9100.0	9952.73	109.4						
Beryllium	227.0	242.10	106.7						
Calcium	22700.0	22929.34	101.0						
Chromium	910.0	988.62	108.6						
Cobalt	2270.0	2409.88	106.2						
Copper	1130.0	1201.75	106.3						
Iron	4550.0	4870.07	107.0						
Magnesium	22700.0	24305.98	107.1						
Manganese	2270.0	2392.66	105.4						
Nickel	2270.0	2441.99	107.6						
Potassium	22700.0	23675.99	104.3						
Silver	1130.0	1171.65	103.7						
Sodium	22700.0	23383.54	103.0						
Vanadium	2270.0	2325.64	102.5						
Zinc	2270.0	2401.27	105.8						

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Solid LCS Source:

LCS(D) ID:

Aqueous LCS Source:

LCS-41329

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Arsenic	455.0	524.82	115.3						
Cadmium	227.0	251.40	110.7						
Lead	455.0	516.81	113.6						
Selenium	455.0	517.53	113.7						
Thallium	455.0	498.52	109.6						

7

Contract: 99163.04

Case No.:

SAS No.:

SDG No.: SH0013

LCS (D) ID:

LCSD-41329

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	455.0	529.82	116.4					
Cadmium	227.0	260.28	114.7					
Lead	455.0	515.35	113.3					
Selenium	455.0	512.33	112.6					
Thallium	455.0	504.08	110.8					

U.S. EPA - CLP

9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

FELF-EFF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Matrix (soil/water): WATER

Level (low/med): MED

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

Analyte	Initial Sample		Serial Dilution		% Difference	Q	M
	Result (I)	C	Result (S)	C			
Aluminum	54.85	B	88.40	U	100		P
Antimony	2.17	U	10.85	U			P
Barium	43.49	B	45.71		5		P
Beryllium	0.05	U	0.25	U			P
Calcium	89202.27		85084.78		5		P
Chromium	0.89	B	1.25	U	100		P
Cobalt	0.80	B	1.25	U	100		P
Copper	6.48	B	13.27		105		P
Iron	410.29		414.66		1		P
Magnesium	26250.97		27225.41		4		P
Manganese	29.22		30.58		5		P
Nickel	3.96	B	4.11		4		P
Potassium	6850.34		6824.17		0		P
Silver	0.45	U	2.25	U			P
Sodium	33072.48		31964.54		3		P
Vanadium	0.45	B	1.75	U	100		P
Zinc	15.18	B	16.87		11		P

U.S. EPA - CLP

9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

FELF-INF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0013

Matrix (soil/water): WATER

Level (low/med): MED

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

Analyte	Initial Sample		Serial Dilution		% Difference	Q	M
	Result (I)	C	Result (S)	C			
Arsenic	89.48		84.49		6		P
Cadmium	2.08	B	1.71		18		P
Lead	1.19	U	5.95	U			P
Selenium	48.80		49.43		1		P
Thallium	3.31	U	16.55	U			P



* Wet Chemistry *

Mitkem Laboratories

Date: 13-Jan-09

Client: Earth Tech – AECOM

Client Sample ID: FELF-EFF

Lab ID: H0013-01

Project: Fort Edward Landfill

Collection Date: 01/06/09 9:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							SM2540_TDS
Total Dissolved Solids	410		10	mg/L	1	01/08/2009 16:52	41188
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	ND		10	mg/L	1	01/08/2009 16:34	41189
SM 5530B-D -- PHENOLS by 4-Aminoantipyrine Method							SM5530_W
Phenolics, Total Recoverable	ND		0.20	mg/L	1	01/12/2009 15:25	41235

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

ANALYTICAL QC SUMMARY REPORT

CLIENT: Earth Tech - AECOM

Work Order: H0013

SM2540_TDS

Project: Fort Edward Landfill

SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: MB-41188	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 1/8/2009	Run ID: MANUAL_090108A
Client ID: MB-41188	Batch ID: 41188	Units: mg/L	Analysis Date: 1/8/2009	SeqNo: 965667
Analyte	Result	PQL	SPK Ref Val	SPK value
Total Dissolved Solids		ND	10	1090
Sample ID: LCS-41188	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 1/8/2009	Run ID: MANUAL_090108A
Client ID: LCS-41188	Batch ID: 41188	Units: mg/L	Analysis Date: 1/8/2009	SeqNo: 965668
Analyte	Result	PQL	SPK Ref Val	SPK value
Total Dissolved Solids		1061	0	1090
			97.3	80
			0	120
			RPD Ref Val	%RPD RPDLimit
				Qual

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

0044

CLIENT: Earth Tech - AECOM
Work Order: H0013
Project: Fort Edward Landfill

ANALYTICAL QC SUMMARY REPORT
SM2540_TSS
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-41189	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 1/8/2009	Run ID: MANUAL_090108B							
Client ID: MB-41189	Batch ID: 41189	Units: mg/L	Analysis Date: 1/8/2009	SeqNo: 965679							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids		ND	10								

Sample ID: LCS-41189	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 1/8/2009	Run ID: MANUAL_090108B						
Client ID: LCS-41189	Batch ID: 41189	Units: mg/L	Analysis Date: 1/8/2009	SeqNo: 965680						
Analyte	Result	PQL	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	60.00	10	65.10	0	92.2	80	120	0		

0045

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Earth Tech - AECOM
Work Order: H0013
Project: Fort Edward Landfill

ANALYTICAL QC SUMMARY REPORT

SM5530_W

SM 5530B-D -- PHENOLS by 4-Aminopyrene Method

Sample ID: MB-41235	SampType: MBLK	TestCode: SM5530_W	Prep Date: 1/12/2009	Run ID: SPEC2_090112C	
Client ID: MB-41235	Batch ID: 41235	Units: mg/L	Analysis Date: 1/12/2009	SeqNo: 966287	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
Phenolics, Total Recoverable		ND	%REC	LowLimit HighLimit	%RPD RPDLimit
				0.20	Qual

Sample ID: LCS-41235	SampType: LCS	TestCode: SM5530_W	Prep Date: 1/12/2009	Run ID: SPEC2_090112C	
Client ID: LCS-41235	Batch ID: 41235	Units: mg/L	Analysis Date: 1/12/2009	SeqNo: 966288	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
Phenolics, Total Recoverable		0.2770	%REC	LowLimit HighLimit	%RPD RPDLimit
				0.2940	Qual
				94.2	0

Sample ID: H0013-01BDUP	SampType: DUP	TestCode: SM5530_W	Prep Date: 1/12/2009	Run ID: SPEC2_090112C	
Client ID: FELF-EFF	Batch ID: 41235	Units: mg/L	Analysis Date: 1/12/2009	SeqNo: 966290	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
Phenolics, Total Recoverable		ND	%REC	LowLimit HighLimit	%RPD RPDLimit
				0	0
				0	20

Sample ID: H0013-01BMS	SampType: MS	TestCode: SM5530_W	Prep Date: 1/12/2009	Run ID: SPEC2_090112C	
Client ID: FELF-EFF	Batch ID: 41235	Units: mg/L	Analysis Date: 1/12/2009	SeqNo: 966291	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
Phenolics, Total Recoverable		0.3350	%REC	LowLimit HighLimit	%RPD RPDLimit
				1.000	0
				33.5	75

Sample ID: H0013-01BPDS	SampType: PDS	TestCode: SM5530_W	Prep Date: 1/12/2009	Run ID: SPEC2_090112C	
Client ID: FELF-EFF	Batch ID: 41235	Units: mg/L	Analysis Date: 1/12/2009	SeqNo: 966293	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
Phenolics, Total Recoverable		0.8870	%REC	LowLimit HighLimit	%RPD RPDLimit
				1.000	0
				88.7	80

0040

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Last Page of Data Report



A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

March 4, 2009

Earth Tech | AECOM
40 British American Boulevard
Latham, NY 12110
Attn: Mr. Stephen Choiniere

RE: Client Project: Fort Edward Landfill, Reference Number: 99163.04
Lab Project #: H0208

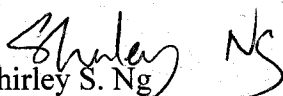
Dear Mr. Choiniere:

Enclosed please find the data report for the analyses of samples associated with the above referenced project.

If you have any questions, please do not hesitate to call me.

We appreciate your business.

Sincerely,


Shirley S. Ng
Project Manager

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0208

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
FELF-EFF	H0208-01	OLM4.2_VOA_W		SW8082_W	ILM4.1_HG_W	SEE DATA
FELF-EFF	H0208-01				ILM4.1_ICP_W	
FELF-INF	H0208-02	OLM4.2_VOA_W			ILM4.1_HG_W	
FELF-INF	H0208-02				ILM4.1_ICP_W	
TRIP BLANK	H0208-03	OLM4.2_VOA_W				

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0208

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
OLM4.2_VOA_W					
H0208-01A	AQ	2/12/2009	2/13/2009	NA	2/20/2009
H0208-02A	AQ	2/12/2009	2/13/2009	NA	2/20/2009
H0208-03A	AQ	2/12/2009	2/13/2009	NA	2/20/2009

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0208

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8082_W					
H0208-01E	AQ	2/12/2009	2/13/2009	2/18/2009	2/20/2009

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0208

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
OLM4.2_VOA_W					
H0208-01A	AQ	OLM4.2_VOA_W	NA	LOW	1
H0208-02A	AQ	OLM4.2_VOA_W	NA	LOW	1
H0208-03A	AQ	OLM4.2_VOA_W	NA	LOW	1

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0208

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8082_W					
H0208-01E	AQ	SW8082_W	PCB_W_PR	NA	1

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0208

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
ILM4.1_HG_W				
H0208-01C	AQ	ILM4.1_HG_W	2/13/2009	2/24/2009
H0208-02B	AQ	ILM4.1_HG_W	2/13/2009	2/24/2009
ILM4.1_ICP_W				
H0208-01C	AQ	ILM4.1_ICP_W	2/13/2009	2/24/2009
H0208-02B	AQ	ILM4.1_ICP_W	2/13/2009	2/24/2009

Analytical Data Package for Earth Tech

Client Project: Fort Edward Landfill

SDG# SH0208

Mitkem Work Order ID: H0208

March 4, 2009

Prepared For: Earth Tech | AECOM
40 British American Boulevard
Latham, NY 12110
Attn: Mr. Stephen Choiniere

Prepared By: Mitkem Laboratories
175 Metro Center Boulevard
Warwick, RI 02886
(401) 732-3400

SDG Narrative

Mitkem Laboratories submits the enclosed data package in response to Earth Tech's Fort Edward Landfill project. Under this deliverable, analysis results are presented for three aqueous samples that were received on February 13, 2009. Analyses were performed per specifications in the project's contract and the chain of custody form. Following the narrative is the Mitkem Work Order for cross-referencing client sample ID and laboratory sample ID.

The analyses were performed according to NYSDEC ASP protocols and reported per NYSDEC ASP requirement for Category A deliverable.

The following observation and/or deviations are observed for the following analyses:

1. Overall Observation:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting.
- M2 peak co-elution.
- M3 rising or falling baseline.
- M4 retention time shift.
- M5 miscellaneous – under this category, the justification is explained.
- M6 software did not integrate peak
- M7 partial peak integration

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. The originals of initial calibrations that are shared among several cases are maintained on file at the laboratory, with photocopies included in the data package.

2. OLM 4.3 Volatile Analysis:

Trap used for instrument V5: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

Samples were preserved with hydrochloric acid with pH<2.

Surrogate recovery: recoveries were within the QC limits.

Lab control sample: spike recoveries were within the QC limits.

Sample analysis: no unusual observation was made for the analysis.

3. PCB analysis:

GC column used: 30 m x 0.53 mm id (0.5 um film thickness) CLPPest and 30 m x 0.53 mm id (0.42 um film thickness) CLPPestII megabore columns.

Samples were not preserved.

Surrogate recovery: recoveries were within the QC limits.

Lab control sample: spike recoveries were within the QC limits.

Sample analysis: no unusual observation was made for the analysis.

4. ILM 4.1 Metals Analysis:

All elements were analyzed using either a Perkin Elmer Model 3100XL Optima or a Perkin Elmer Model 4300DV ICAP.

Samples were preserved with nitric acid with pH<2.

Lab control sample: spike recoveries were within the QC limits with the exception of cadmium in LCS-41928 and antimony in LCSD-41928. The potential high bias in cadmium and antimony would not affect the associate samples since no cadmium and antimony was detected in the samples.

Sample analysis: serial dilution was performed on sample FELF-INF. Percent differences were within the QC limits. No unusual observations were made during sample analysis.

5. Wet Chemistry Analysis:

Samples were analyzed for total dissolved solids by SM2540, total suspended solids by method SM2540, and phenolics by method SM5530.

Lab control sample: spike recoveries were within the QC limits.

Matrix spike: matrix spike analysis was performed on sample FELF-EFF for phenol analysis. Spike recoveries were within the QC limits.

Duplicate: duplicate analysis was performed on sample FELF-EFF for total dissolved solids, total suspended solids and phenol analysis. Percent RPDs were within the QC limits.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

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


Shirley Ng
Project Manager
03/04/09



Sample Transmittal Documentation

Mitkem Laboratories

13/Feb/09 10:44

WorkOrder: H0208

Client ID: EARTH_NY

Project: Fort Edward Landfill

Location:

Comments: under contract D004445-18-19-20-21-MIT-01

Case:

SDG:

PO: 99163.04

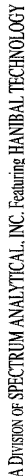
HC Due: 03/06/09 Report Level: ASP-A

Fax Due: 02/27/09 EDD:

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL	Storage
H0208-01A	FELF-EFF	02/12/2009 10:00	02/13/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA
H0208-01B	FELF-EFF	02/12/2009 10:00	02/13/2009	Aqueous	SM5530_W		☐	☐	☐	E1
H0208-01C	FELF-EFF	02/12/2009 10:00	02/13/2009	Aqueous	ILM4.1_HG_W	ILM	☐	☐	☐	M1
					ILM4.1_ICP_W	ILM	☐	☐	☒	M1
H0208-01D	FELF-EFF	02/12/2009 10:00	02/13/2009	Aqueous	SM2540_TDS		☐	☐	☐	E1
					SM2540_TSS		☐	☐	☐	E1
H0208-01E	FELF-EFF	02/12/2009 10:00	02/13/2009	Aqueous	SW8082_W	extract 1L to 1mL, use 6 level IC	☐	☐	☒	E1
H0208-02A	FELF-INF	02/12/2009 10:30	02/13/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA
H0208-02B	FELF-INF	02/12/2009 10:30	02/13/2009	Aqueous	ILM4.1_HG_W	ILM	☐	☐	☐	M1
					ILM4.1_ICP_W	ILM	☐	☐	☒	M1
H0208-03A	TRIP BLANK	02/12/2009 0:00	02/13/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA

Client Rep: Shirley S Ng

Page 1 of 1



Page 1 of 1

Special Handling:
☒ Standard TAT - 10 to 15 business days
☐ Rush TAT - Date Needed: _____
 • All TATs subject to laboratory approval
 Min. 24-hour notification needed for rushes.
 • Samples disposed of after 60 days unless
 otherwise instructed.

40 British American Blvd.
Latham, NY 12110

Invoice To: Same

P.O. No.: _____ RQN: _____

Invoice To: Same

Project No.:

Site Name: Fort Edward Lane Kill (FELF)

Location: Fort Edward
State: NY

Location: 10100000 State: NY
Sampler(s): RKV

1= $\text{Na}_2\text{S}_2\text{O}_3$ 2= HCl 3= H_2SO_4 4= HNO_3 5= NaOH 6=Ascorbic Acid
7= CH_3OH 8= NaHSO_4 9= NaOH 10=

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

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:
H0208-01	FELF-EFF	2/12/09	10:00
H0208-02	FELF-INF	2/12/09	10:30
H0208-03	Trip Blank	—	—
		(PV)	

Preservative

Type	Matrix
------	--------

# of Amber C	# of Clear G	# of Plastic
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
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31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
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83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

QA Reporting Notes:
(check if needed)

☐ Provide MA DEP MCP CAM Report

☐ Provide CT DEP RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☐ Other _____

State specific reporting standards:

Fax results when available to ()

☐ E-mail to

EDD Format

Condition upon receipt: ☒ Iced ☐ Ambient ☒ C ☒

Relinquished by:

Received by:

Time:

Rebecca Vanderheyden

FEDX

2/12/09	1300
---------	------

Vanderbilt

2/13/39	8:20
---------	------

#XRXJ

175 Metro Center Boulevard • Warwick, RI 02886-1755 • 401-732-3400 • Fax 401-732-3499 • www.mitkem.com

8655 9902 2909

00007

MITKEM LABORATORIES
Sample Condition Form

Page 1 of 1

Received By: <u>VSC</u>		Reviewed By: <u>SN</u>		Date: <u>2/13/09</u>		MITKEM Workorder #: <u>H0008</u>	
Client Project: <u>Fort ED Landfill</u>				Client: <u>Earth NY</u>			Soil Headspace or Air Bubbles ≥ 1/4"

	Lab Sample ID	Preservation (pH)					VOA Matrix	
		HNO ₃	H ₂ SO ₄	HCl	NaOH	H ₃ PO ₄		
1) Cooler Sealed <u>Yes</u> / No	<u>H0008 01</u>	<u><2</u>	<u><2</u>				<u>H</u>	
	<u>H0008 02</u>	<u><2</u>					<u>H</u>	
2) Custody Seal(s) <u>Present</u> / Absent	<u>H0008 03</u>						<u>H</u>	
<u>Coolers</u> / Bottles								
<u>Intact</u> / Broken								
3) Custody Seal Number(s) <u>N/A</u>								
4) Chain-of-Custody <u>Present</u> / Absent								
5) Cooler Temperature <u>5°C</u>								
Coolant Condition <u>ICE</u>								
6) Airbill(s) <u>Present</u> / Absent								
Airbill Number(s) <u>FDX</u>								
<u>8059 9402 0009</u>								
7) Sample Bottles <u>Intact</u> / Broken / Leaking								
8) Date Received <u>2/13/09</u>								
9) Time Received <u>8:30</u>								
Preservative Name/Lot No:								

See Sample Condition Notification/Corrective Action Form yes / no

Rad OK yes / no

VOA Matrix Key:

US = Unpreserved Soil **A** = Air

UA = Unpreserved Aqu. **H** = HCl

M = MeOH **E** = Encore

N = NaHSO₄ **F** = Freeze



* Volante *

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

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5348.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
			Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

EPA OLM

0010

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

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5348.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5348.D
Level: (TRACE or LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5350.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		26	
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		46	
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0013

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

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5350.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5350.D
Level: (TRACE or LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.
TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5349.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5349.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5349.D
Level: (TRACE or LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.
VV5LCS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-41887
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5347.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		41	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		48	
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		51	
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		54	
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

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

CLIENT SAMPLE NO.

VV5LCS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-41887
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5347.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		58	
100-41-4	Ethylbenzene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: H0208

Mod. Ref No.:

SDG No.: SH0208

Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (TOL) #	VDMC2 (BFB) #	VDMC3 (DCE) #					TOT OUT
01	VBLKV5	109	94	93					0
02	VV5LCS	103	87	97					0
03	FELF-EFF	109	87	90					0
04	TRIP BLANK	106	89	97					0
05	FELF-INF	101	90	91					0
06	VHBLKV5	100	90	97					0

QC LIMITS

VDMC1 (TOL) = Toluene-d8

(88-110)

VDMC2 (BFB) = Bromofluorobenzene

(86-115)

VDMC3 (DCE) = 1,2-Dichloroethane-d4

(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

VV5LCS

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: H0208

Mod. Ref No.:

SDG No.: SH0208

Lab Sample ID: LCS-41887

LCS Lot No.:

Date Extracted: 02/20/2009

Date Analyzed (1): 02/20/2009

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	50.0000	0.0000	40.9919	82		61 - 145
Benzene	50.0000	0.0000	47.9811	96		76 - 127
Trichloroethene	50.0000	0.0000	50.7517	102		71 - 120
Toluene	50.0000	0.0000	54.1588	108		76 - 125
Chlorobenzene	50.0000	0.0000	57.6523	115		75 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Lab File ID: V5K5346.D Lab Sample ID: MB-41887
Instrument ID: V5
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 02/20/2009
Level: (TRACE or LOW/MED) LOW Time Analyzed: 21:36
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VV5LCS	LCS-41887	V5K5347.D	22:03
02	FELF-EFF	H0208-01A	V5K5348.D	22:30
03	TRIP BLANK	H0208-03A	V5K5349.D	22:57
04	FELF-INF	H0208-02A	V5K5350.D	23:50
05	VHBLKV5	VHBLKV5	V5K5352.D	00:45

COMMENTS:

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

CLIENT SAMPLE NO.

VBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-41887
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5346.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0024

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

CLIENT SAMPLE NO.

VBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-41887
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5346.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

VBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-41887
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5346.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 02/20/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

VHBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKV5
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5352.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/21/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

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

CLIENT SAMPLE NO.

VHBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKV5
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5352.D
Level: (TRACE/LOW/MED) LOW Date Received: 02/13/2009
% Moisture: not dec. Date Analyzed: 02/21/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

VHBLKV5

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLKV5
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K5352.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 02/21/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.



* PCB Organics *

1H - FORM I ARO
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0208-01E
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G0316F.D/E3G0316R.D
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/13/2009
 Extraction: (Type) SEPF Date Extracted: 02/18/2009
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/20/2009
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
12674-11-2	Aroclor-1016		0.050	U
11104-28-2	Aroclor-1221		0.050	U
11141-16-5	Aroclor-1232		0.050	U
53469-21-9	Aroclor-1242		0.050	U
12672-29-6	Aroclor-1248		0.050	U
11097-69-1	Aroclor-1254		0.050	U
11096-82-5	Aroclor-1260		0.050	U

1H - FORM I PEST
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ALCS3D(1)

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-41831
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G0314F.D
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
 Extraction: (Type) SEPF Date Extracted: 02/18/2009
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/20/2009
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
12674-11-2	Aroclor-1016		0.29	
11104-28-2	Aroclor-1221		0.050	U
11141-16-5	Aroclor-1232		0.050	U
53469-21-9	Aroclor-1242		0.050	U
12672-29-6	Aroclor-1248		0.050	U
11097-69-1	Aroclor-1254		0.050	U
11096-82-5	Aroclor-1260		0.30	

1H - FORM I PEST
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ALCS3D(2)

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-41831
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G0314R.D
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
 Extraction: (Type) SEPF Date Extracted: 02/18/2009
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/20/2009
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
12674-11-2	Aroclor-1016		0.27	
11104-28-2	Aroclor-1221		0.050	U
11141-16-5	Aroclor-1232		0.050	U
53469-21-9	Aroclor-1242		0.050	U
12672-29-6	Aroclor-1248		0.050	U
11097-69-1	Aroclor-1254		0.050	U
11096-82-5	Aroclor-1260		0.35	

1H - FORM I PEST
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ALCSD3D(1)

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-41831

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G0315F.D

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

Extraction: (Type) SEPF Date Extracted: 02/18/2009

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/20/2009

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

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

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
12674-11-2	Aroclor-1016		0.30	
11104-28-2	Aroclor-1221		0.050	U
11141-16-5	Aroclor-1232		0.050	U
53469-21-9	Aroclor-1242		0.050	U
12672-29-6	Aroclor-1248		0.050	U
11097-69-1	Aroclor-1254		0.050	U
11096-82-5	Aroclor-1260		0.29	

1H - FORM I PEST
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ALCSD3D(2)

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-41831
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G0315R.D
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
 Extraction: (Type) SEPF Date Extracted: 02/18/2009
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/20/2009
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
12674-11-2	Aroclor-1016		0.29	
11104-28-2	Aroclor-1221		0.050	U
11141-16-5	Aroclor-1232		0.050	U
53469-21-9	Aroclor-1242		0.050	U
12672-29-6	Aroclor-1248		0.050	U
11097-69-1	Aroclor-1254		0.050	U
11096-82-5	Aroclor-1260		0.29	

2Q - FORM II ARO-1
WATER AROCLOR SURROGATE RECOVERY

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	ABLK3D	42	48	51	53			0
02	ALCS3D	48	51	58	61			0
03	ALCSD3D	47	51	56	58			0
04	FELF-EFF	38	41	65	68			0

TCX = Tetrachloro-m-xylene
DCB = Decachlorobiphenyl

QC LIMITS
(32-89)
(40-135)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

ALCS3D

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Lab Sample ID: LCS-41831 LCS Lot No.: _____
Date Extracted: 02/18/2009 Date Analyzed (1): 02/20/2009
Instrument ID (1): E3 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	0.4000	0.2850	71	25-145
Aroclor-1260	0.4000	0.2982	75	30-145

Instrument ID (2): E3 GC Column(2): CLPPestII ID: 0.53 (mm)
Date Analyzed (2): 02/20/2009

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	0.4000	0.2661	67	25-145
Aroclor-1260	0.4000	0.3525	88	30-145

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

SW846

0037

3N - FORM III ARO-3
WATER AROCLOR LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

ALCSD3D

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Lab Sample ID: LCSD-41831 LCS Lot No.: _____
Date Extracted: 02/18/2009 Date Analyzed (1): 02/20/2009
Instrument ID (1): E3 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	0.4000	0.2950	74	25-145
Aroclor-1260	0.4000	0.2937	73	30-145

Instrument ID (2): E3 GC Column(2): CLPPestII ID: 0.53 (mm)
Date Analyzed (2): 02/20/2009

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
Aroclor-1016	0.4000	0.2852	71	25-145
Aroclor-1260	0.4000	0.2908	73	30-145

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 4 outside limits.

COMMENTS:

SW846

0038

4F - FORM IV ARO
AROCLOR METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLK3D

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
Lab File ID: E3G0313F.D / E3G0313R.D Lab Sample ID: MB-41831
Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 02/18/2009
Sulfur Cleanup: (Y/N) Y GPC Cleanup: (Y/N) N
Acid Cleanup: (Y/N) Y
Date Analyzed (1): 02/20/2009 Date Analyzed (2): 02/20/2009
Time Analyzed (1): 15:24 Time Analyzed (2): 15:24
Instrument ID (1): E3 Instrument ID (2): E3
GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	ALCS3D	LCS-41831	02/20/2009	02/20/2009
02	ALCSD3D	LCSD-41831	02/20/2009	02/20/2009
03	FELF-EFF	H0208-01E	02/20/2009	02/20/2009

COMMENTS:

1H - FORM I ARO
 AROCLOR ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLK3D

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: H0208 Mod. Ref No.: _____ SDG No.: SH0208
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-41831
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: E3G0313F.D/E3G0313R.D
 % Moisture: _____ Decanted: (Y/N) _____ Date Received: _____
 Extraction: (Type) SEPF Date Extracted: 02/18/2009
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 02/20/2009
 Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y
 Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/L	Q
12674-11-2	Aroclor-1016		0.050	U
11104-28-2	Aroclor-1221		0.050	U
11141-16-5	Aroclor-1232		0.050	U
53469-21-9	Aroclor-1242		0.050	U
12672-29-6	Aroclor-1248		0.050	U
11097-69-1	Aroclor-1254		0.050	U
11096-82-5	Aroclor-1260		0.050	U



* Metals *

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Mitkem Laboratories Contract: 99163.04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SH0208
SOW No.: ILM04.1

EPA Sample No.

FELF-EFF

FELF-INF

Lab Sample ID

H0208-01

H0208-02

Were ICP interelement corrections applied? Yes/No YES
Were background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature:

Dawn E. Smart

Name:

Dawn E. Smart

Date:

2/27/09

Title:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FELF-EFF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0208

Matrix (soil/water): WATER

Lab Sample ID: H0208-01

Level (low/med): MED

Date Received: 02/13/2009

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	391			P
7440-36-0	Antimony	2.6	B		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	40.9	B		P
7440-41-7	Beryllium	0.040	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	73300			P
7440-47-3	Chromium	1.2	B		P
7440-48-4	Cobalt	0.90	B		P
7440-50-8	Copper	7.9	B		P
7439-89-6	Iron	1400			P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	18600			P
7439-96-5	Manganese	74.2			P
7439-97-6	Mercury	0.061	B		CV
7440-02-0	Nickel	3.3	B		P
7440-09-7	Potassium	7450			P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	25900			P
7440-28-0	Thallium	3.4	U		P
7440-62-2	Vanadium	1.8	B		P
7440-66-6	Zinc	27.2			P

Color Before COLORLESS Clarity Before: CLEAR

Texture:

Color After: COLORLESS Clarity After: CLEAR

Artifacts:

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FELF-INF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0208

Matrix (soil/water): WATER

Lab Sample ID: H0208-02

Level (low/med): MED

Date Received: 02/13/2009

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18.2	U		P
7440-36-0	Antimony	3.3	B		P
7440-38-2	Arsenic	8.3	B		P
7440-39-3	Barium	89.1	B		P
7440-41-7	Beryllium	0.040	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	96900			P
7440-47-3	Chromium	0.21	B		P
7440-48-4	Cobalt	3.4	B		P
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	48300			P
7439-92-1	Lead	1.9	U		P
7439-95-4	Magnesium	25800			P
7439-96-5	Manganese	2470			P
7439-97-6	Mercury	0.79			CV
7440-02-0	Nickel	4.0	B		P
7440-09-7	Potassium	6280			P
7782-49-2	Selenium	16.1			P
7440-22-4	Silver	0.62	B		P
7440-23-5	Sodium	54500			P
7440-28-0	Thallium	3.4	U		P
7440-62-2	Vanadium	0.61	B		P
7440-66-6	Zinc	12.1	B		P

Color Before COLORLESS Clarity Before: CLEAR

Texture:

Color After: COLORLESS Clarity After: CLEAR

Artifacts:

Comments:

U.S. EPA - CLP

3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0208

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-41925

FIMS1_090224A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Mercury	0.014	U	0.085	B	0.014	U	0.014	U	0.067	B	

U.S. EPA - CLP

3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0208

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-41928

OPTIMA3_090224A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Potassium	66.0	B	37.0	U	41.9	B			38.275	B	
Sodium	46.0	U	46.0	U	46.0	U			46.020	U	

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3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0208

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-41928

OPTIMA3_090224B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	18.2	U	18.2	U	18.2	U			18.200	U	
Antimony	2.2	B	3.4	B	6.1	B			5.271	B	
Arsenic	3.2	U	-4.1	B	3.2	U			3.210	U	
Barium	1.0	B	0.9	B	0.8	B			0.953	B	
Beryllium	0.0	U	0.0	U	0.0	U			0.040	U	
Cadmium	0.2	U	0.2	U	0.2	U			0.210	U	
Calcium	74.6	U	74.6	U	74.6	U			115.084	B	
Chromium	0.2	B	0.2	U	0.2	B			0.223	B	
Cobalt	0.3	B	0.3	U	0.3	U			0.290	U	
Copper	2.9	B	3.0	B	2.9	B			4.119	B	
Iron	3.4	B	5.8	B	5.3	B			19.292	B	
Lead	1.9	U	1.9	U	1.9	U			1.910	U	
Magnesium	6.9	U	6.9	U	6.9	U			6.930	U	
Manganese	0.4	B	0.2	B	0.2	B			2.361	B	
Nickel	0.4	B	0.4	B	0.4	B			0.380	U	
Selenium	4.7	B	4.0	U	4.0	U			3.980	U	
Silver	7.4	B	3.7	B	2.4	B			5.793	B	
Thallium	3.4	U	3.4	U	3.4	U			3.350	U	
Vanadium	0.4	U	0.4	U	0.4	U			0.390	U	
Zinc	2.0	B	3.6	B	3.4	B			5.587	B	

7

Lab Name:	Mitkem Laboratories	Contract:	99163.04
Lab Code:	MITKEM	Case No.:	
		SAS No.:	
		SDG No.:	SH0208
Solid LCS Source:			
			LCS(D) ID:
Aqueous LCS Source:			LCS-41928

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9002.83	98.9						
Antimony	455.0	471.64	103.7						
Arsenic	455.0	532.23	117.0						
Barium	9100.0	9236.10	101.5						
Beryllium	227.0	241.17	106.2						
Cadmium	227.0	273.91	120.7						
Calcium	22700.0	22671.11	99.9						
Chromium	910.0	970.76	106.7						
Cobalt	2270.0	2406.55	106.0						
Copper	1130.0	1153.11	102.0						
Iron	4550.0	4843.64	106.5						
Lead	455.0	522.31	114.8						
Magnesium	22700.0	23521.32	103.6						
Manganese	2270.0	2407.28	106.0						
Nickel	2270.0	2407.20	106.0						
Potassium	22700.0	22881.19	100.8						
Selenium	455.0	531.74	116.9						
Silver	1130.0	1228.96	108.8						
Sodium	22700.0	22983.66	101.2						
Thallium	455.0	513.85	112.9						
Vanadium	2270.0	2315.14	102.0						
Zinc	2270.0	2467.63	108.7						

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7

LABORATORY CONTROL SAMPLE

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SH0208

Solid LCS Source:

LCS(D) ID:

Aqueous LCS Source:

LCSD-41928

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9116.73	100.2						
Antimony	455.0	588.25	129.3						
Arsenic	455.0	515.81	113.4						
Barium	9100.0	9243.23	101.6						
Beryllium	227.0	242.76	106.9						
Cadmium	227.0	261.24	115.1						
Calcium	22700.0	22846.89	100.6						
Chromium	910.0	982.87	108.0						
Cobalt	2270.0	2440.55	107.5						
Copper	1130.0	1137.75	100.7						
Iron	4550.0	4926.18	108.3						
Lead	455.0	514.70	113.1						
Magnesium	22700.0	23590.48	103.9						
Manganese	2270.0	2425.01	106.8						
Nickel	2270.0	2445.92	107.7						
Potassium	22700.0	23110.07	101.8						
Selenium	455.0	516.86	113.6						
Silver	1130.0	1226.47	108.5						
Sodium	22700.0	23280.84	102.6						
Thallium	455.0	500.14	109.9						
Vanadium	2270.0	2314.73	102.0						
Zinc	2270.0	2514.02	110.7						

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9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

FELF-INF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0208

Matrix (soil/water): WATER

Level (low/med): MED

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

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	18.20	U	91.00	U			P
Antimony	3.30	B	11.05	U	100		P
Arsenic	8.34	B	16.05	U	100		P
Barium	89.15	B	93.61		5		P
Beryllium	0.04	U	0.20	U			P
Cadmium	0.21	U	1.05	U			P
Calcium	96945.56		92295.44		5		P
Chromium	0.21	B	0.87		314		P
Cobalt	3.43	B	4.19		22		P
Copper	4.99	B	10.78		116		P
Iron	48292.37		50311.68		4		P
Lead	1.91	U	9.55	U			P
Magnesium	25838.90		26767.36		4		P
Manganese	2467.75		2572.59		4		P
Nickel	3.96	B	4.47		13		P
Potassium	6278.07		6634.00		6		P
Selenium	16.12		19.90	U	100		P
Silver	0.62	B	2.50	U	100		P
Sodium	54460.38		55359.52		2		P
Thallium	3.35	U	16.75	U			P
Vanadium	0.61	B	1.95	U	100		P
Zinc	12.11	B	12.97		7		P



* Wet Chemistry *

Mitkem Laboratories**Date:** 25-Feb-09**Client:** Earth Tech – AECOM**Client Sample ID:** FELF-EFF**Lab ID:** H0208-01**Project:** Fort Edward Landfill**Collection Date:** 02/12/09 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							SM2540_TDS
Total Dissolved Solids	340		10	mg/L	1	02/17/2009 16:43	41816
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	15		10	mg/L	1	02/17/2009 16:43	41817
SM 5530B-D -- PHENOLS by 4-Aminoantipyrine Method							SM5530_W
Phenolics, Total Recoverable	ND		0.20	mg/L	1	02/23/2009 11:10	41916

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

0052

CLIENT: Earth Tech – AECOM
Work Order: H0208
Project: Fort Edward Landfill

ANALYTICAL QC SUMMARY REPORT
SM2540_TDS
SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: MB-41816	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 2/17/2009	Run ID: MANUAL_090217D	
Client ID: MB-41816	Batch ID: 41816	Units: mg/L	Analysis Date: 2/17/2009	SeqNo: 982261	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
		PQL	%REC	LowLimit	HighLimit
Total Dissolved Solids		ND			%RPD RPDLimit
					Qual
		10			
Sample ID: LCS-41816	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 2/17/2009	Run ID: MANUAL_090217D	
Client ID: LCS-41816	Batch ID: 41816	Units: mg/L	Analysis Date: 2/17/2009	SeqNo: 982262	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
		PQL	%REC	LowLimit	HighLimit
Total Dissolved Solids		565.0	0	101	80
		10			120
					0
Sample ID: H0208-01DDUP	SampType: DUP	TestCode: SM2540_TDS	Prep Date: 2/17/2009	Run ID: MANUAL_090217D	
Client ID: FELF-EFF	Batch ID: 41816	Units: mg/L	Analysis Date: 2/17/2009	SeqNo: 982273	
Analyte		Result	SPK Ref Val	SPK value	RPD Ref Val
		PQL	%REC	LowLimit	HighLimit
Total Dissolved Solids		352.0	0	0	0
		10			0
					343.0
					2.59
					20

0053

CLIENT: Earth Tech - AECOM
Work Order: H0208
Project: Fort Edward Landfill

ANALYTICAL QC SUMMARY REPORT
SM2540_TSS
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-41817	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 2/17/2009	Run ID: MANUAL_090217C
Client ID: MB-41817	Batch ID: 41817	Units: mg/L	Analysis Date: 2/17/2009	SeqNo: 982062
Analyte	Result	PQL	SPK value	SPK Ref Val
Total Suspended Solids	ND	10	%REC LowLimit HighLimit	RPD Ref Val %RPD RPDLimit Qual

Sample ID: LCS-41817	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 2/17/2009	Run ID: MANUAL_090217C
Client ID: LCS-41817	Batch ID: 41817	Units: mg/L	Analysis Date: 2/17/2009	SeqNo: 982061
Analyte	Result	PQL	SPK value	SPK Ref Val
Total Suspended Solids	396.0	10	394.0	101 80 120 0

Sample ID: H0208-01DDUP	SampType: DUP	TestCode: SM2540_TSS	Prep Date: 2/17/2009	Run ID: MANUAL_090217C
Client ID: FELF-EFF	Batch ID: 41817	Units: mg/L	Analysis Date: 2/17/2009	SeqNo: 982060
Analyte	Result	PQL	SPK value	SPK Ref Val
Total Suspended Solids	14.00	10	0	0 0 0 15.00 6.9 20

0054

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Earth Tech – AECOM
Work Order: H0208
Project: Fort Edward Landfill

ANALYTICAL QC SUMMARY REPORT
SM5530_W
SM 5530B-D -- PHENOLS by 4-Aminoantipyrine Method

Sample ID: MB-41916	SampType: MBLK	TestCode: SM5530_W	Prep Date: 2/23/2009	Run ID: SPEC2_090223B							
Client ID: MB-41916	Batch ID: 41916	Units: mg/L	Analysis Date: 2/23/2009	SeqNo: 984505							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	ND	0.20									

Sample ID: LCS-41916	SampType: LCS	TestCode: SM5530_W	Prep Date: 2/23/2009	Run ID: SPEC2_090223B							
Client ID: LCS-41916	Batch ID: 41916	Units: mg/L	Analysis Date: 2/23/2009	SeqNo: 984506							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	0.3410	0.20	0.2940	0	116	80	120	0			

Sample ID: H0208-01BDUP	SampType: DUP	TestCode: SM5530_W	Prep Date: 2/23/2009	Run ID: SPEC2_090223B							
Client ID: FELF-EFF	Batch ID: 41916	Units: mg/L	Analysis Date: 2/23/2009	SeqNo: 984508							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	ND	0.20	0	0	0	0	0	0.1930	30.4	20	

Sample ID: H0208-01BMS	SampType: MS	TestCode: SM5530_W	Prep Date: 2/23/2009	Run ID: SPEC2_090223B							
Client ID: FELF-EFF	Batch ID: 41916	Units: mg/L	Analysis Date: 2/23/2009	SeqNo: 984509							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	1.015	0.20	1.000	0.1930	82.2	75	125	0			

0055

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Last Page of Data Report



A DIVISION OF SPECTRUM ANALYTICAL, INC. Featuring HANIBAL TECHNOLOGY

March 30, 2009

Earth Tech | AECOM
40 British American Boulevard
Latham, NY 12110
Attn: Mr. Stephen Choiniere

RE: Client Project: Fort Edward Landfill, Reference Number: 99163.04
Lab Project #: H0376

Dear Mr. Choiniere:

Enclosed please find the data report for the analyses of samples associated with the above referenced project.

If you have any questions, please do not hesitate to call me.

We appreciate your business.

Sincerely,

A handwritten signature in black ink, appearing to read "Shirley Ng".

Shirley S. Ng
Project Manager

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0376

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
FELF-INF	H0376-01	OLM4.2_VOA_W			ILM4.1_HG_W	
FELF-INF	H0376-01				ILM4.1_ICP_W	
FELF-EFF	H0376-02	OLM4.2_VOA_W			ILM4.1_HG_W	SEE DATA
FELF-EFF	H0376-02				ILM4.1_ICP_W	
TRIP BLANK	H0376-03	OLM4.2_VOA_W				

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0376

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
OLM4.2_VOA_W					
H0376-01A	AQ	3/12/2009	3/13/2009	NA	3/17/2009
H0376-02A	AQ	3/12/2009	3/13/2009	NA	3/17/2009
H0376-03A	AQ	3/12/2009	3/13/2009	NA	3/17/2009

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0376

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
OLM4.2_VOA_W					
H0376-01A	AQ	OLM4.2_VOA_W	NA	LOW	1
H0376-02A	AQ	OLM4.2_VOA_W	NA	LOW	1
H0376-03A	AQ	OLM4.2_VOA_W	NA	LOW	1

Mitkem Laboratories

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

Project Name : Fort Edward Landfill

SDG : H0376

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
ILM4.1_HG_W				
H0376-01B	AQ	ILM4.1_HG_W	3/13/2009	3/24/2009
H0376-02C	AQ	ILM4.1_HG_W	3/13/2009	3/24/2009
H0376-02CDUP	AQ	ILM4.1_HG_W	3/13/2009	3/24/2009
H0376-02CMS	AQ	ILM4.1_HG_W	3/13/2009	3/24/2009
ILM4.1_ICP_W				
H0376-01B	AQ	ILM4.1_ICP_W	3/13/2009	3/25/2009
H0376-01BDUP	AQ	ILM4.1_ICP_W	3/13/2009	3/25/2009
H0376-01BMS	AQ	ILM4.1_ICP_W	3/13/2009	3/25/2009
H0376-02C	AQ	ILM4.1_ICP_W	3/13/2009	3/25/2009

Analytical Data Package for Earth Tech

Client Project: Fort Edward Landfill

SDG# SH0376

Mitkem Work Order ID: H0376

March 30, 2009

Prepared For: Earth Tech | AECOM
40 British American Boulevard
Latham, NY 12110
Attn: Mr. Stephen Choiniere

Prepared By: Mitkem Laboratories
175 Metro Center Boulevard
Warwick, RI 02886
(401) 732-3400

SDG Narrative

Mitkem Laboratories submits the enclosed data package in response to Earth Tech's Fort Edward Landfill project. Under this deliverable, analysis results are presented for three aqueous samples that were received on March 13, 2009. Analyses were performed per specifications in the project's contract and the chain of custody form. Following the narrative is the Mitkem Work Order for cross-referencing client sample ID and laboratory sample ID.

The analyses were performed according to NYSDEC ASP protocols and reported per NYSDEC ASP requirement for Category A deliverable.

The following observation and/or deviations are observed for the following analyses:

1. Overall Observation:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting.
- M2 peak co-elution.
- M3 rising or falling baseline.
- M4 retention time shift.
- M5 miscellaneous – under this category, the justification is explained.
- M6 software did not integrate peak
- M7 partial peak integration

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. The originals of initial calibrations that are shared among several cases are maintained on file at the laboratory, with photocopies included in the data package.

2. OLM 4.3 Volatile Analysis:

Trap used for instrument V1: OI Analytical #10 trap containing 8 cm each of Tenax, silica gel and carbon molecular sieve.

GC column used: 30 m x 0.25 mm id (1.4 um film thickness) DB-624 capillary column.

Samples were preserved with hydrochloric acid with pH<2.

Surrogate recovery: recoveries were within the QC limits.

Lab control sample: spike recoveries were within the QC limits.

Sample analysis: no unusual observation was made for the analysis.

3. ILM 4.1 Metals Analysis:

All elements were analyzed using either a Perkin Elmer Model 3100XL Optima or a Perkin Elmer Model 4300DV ICAP.

Samples were preserved with nitric acid with pH<2.

Lab control sample: spike recoveries were within the QC limits.

Matrix spike analysis: matrix spike was performed on sample FELF-EFF for mercury only and also on sample FELF-INF for ICP. Spike recoveries were within the QC limits. The matrix spike percent recovery for iron and manganese in sample FELF-INF could not be accurately determined, as the sample concentration was significantly greater than the spike concentration. When the sample concentration is more than four times the spike concentration, it tends to obscure the relatively smaller spike amount; control limits do not apply in this circumstance.

Duplicate analysis: duplicate analysis was performed on sample FELF-EFF for mercury only and also on sample FELF-INF for ICP. Percent RPDs were within the QC limits.

Sample analysis: serial dilution was performed on sample FELF-INF. Percent differences were within the QC limits. No unusual observations were made during sample analysis.

4. Wet Chemistry Analysis:

Samples were analyzed for total dissolved solids by SM2540, total suspended solids by method SM2540, and phenolics by method SM5530.

Lab control sample: spike recoveries were within the QC limits.

Sample analysis: no unusual observations were made during sample analysis.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

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

A handwritten signature in black ink, appearing to read "Shirley Ng". The signature is written in a cursive, flowing style.

Shirley Ng
Project Manager
03/30/09

Sample Transmittal Documentation

Mitkem Laboratories

13/Mar/09 12:17

WorkOrder: H0376

Client ID: EARTH_NY

Project: Fort Edward Landfill

Location:

Comments: under contract D004445-18-19-20-21-MIT-01

Case:

SDG:

PO: 99163.04

HC Due: 04/03/09

Fax Due: 03/27/09

Report Level: ASP-A

EDD:

Sample ID	HS Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Lab Test Comments	Hold	MS	SEL	Storage
H0376-01A	FELF-INF	03/12/2009 11:00	03/13/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA
H0376-01B	FELF-INF	03/12/2009 11:00	03/13/2009	Aqueous	ILM4.1_HG_W	ILM	☐	☐	☐	M3
					ILM4.1_ICP_W	ILM	☐	☐	☒	M3
H0376-02A	FELF-EFF	03/12/2009 10:30	03/13/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA
H0376-02B	FELF-EFF	03/12/2009 10:30	03/13/2009	Aqueous	SM5530_W		☐	☐	☐	H1
H0376-02C	FELF-EFF	03/12/2009 10:30	03/13/2009	Aqueous	ILM4.1_HG_W	ILM	☐	☐	☐	M3
					ILM4.1_ICP_W	ILM	☐	☐	☒	M3
H0376-02D	FELF-EFF	03/12/2009 10:30	03/13/2009	Aqueous	SM2540_TDS		☐	☐	☐	H1
					SM2540_TSS		☐	☐	☐	H1
H0376-03A	TRIP BLANK	03/12/2009 0:00	03/13/2009	Aqueous	OLM4.2_VOA_W	NYS ADD LCS	☐	☐	☐	VOA

Client Rep: Shirley S Ng

Page 1 of 1

MITKEM LABORATORIES
Sample Condition Form

Page 1 of 1

Received By: <u>CAN</u>		Reviewed By: <u>CJA</u>		Date: <u>3/13/09</u>		MITKEM Workorder #: <u>H0376</u>			
Client Project: <u>Fort Calumet landfill</u>				Client: <u>EAH</u>				Soil Headspace or Air Bubbles $\geq 1/4"$	
		Lab Sample ID		Preservation (pH)					VOA Matrix
				HNO ₃	H ₂ SO ₄	HCl	NaOH	H ₃ PO ₄	
1) Cooler Sealed	<u>Yes</u> / No	<u>H0376</u>	<u>01</u>						<u>H</u>
2) Custody Seal(s)	<u>Present</u> / Absent	<u>H0376</u>	<u>02</u>	<u><2</u>	<u><2</u>				<u>H</u>
	<u>Coolers</u> / Bottles	<u>H0376</u>	<u>03</u>						<u>H</u>
	<u>Intact</u> / Broken								
3) Custody Seal Number(s)	<u>NA</u>								
4) Chain-of-Custody	<u>Present</u> / Absent								
5) Cooler Temperature	<u>2°C</u>								
Coolant Condition	<u>ICE</u>								
6) Airbill(s)	<u>Present</u> / Absent								
Airbill Number(s)	<u>Falco</u>								
	<u>86599092572</u>								
7) Sample Bottles	<u>Intact</u> / Broken / Leaking								
8) Date Received	<u>3/13/09</u>								
9) Time Received	<u>8:50</u>								
Preservative Name/Lot No:									

VOA Matrix Key:

US = Unpreserved Soil	A = Air
UA = Unpreserved Aqu.	H = HCl
M = MeOH	E = Encore
N = NaHSO ₄	F = Freeze

See Sample Condition Notification/Corrective Action Form yes / no

Rad OK yes / no



• Volatile •

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

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5558.D
Level: (TRACE/LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		56	
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		87	
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		2.2	J
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0010

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

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5558.D
Level: (TRACE/LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		2.1	J
100-41-4	Ethylbenzene		10	U
1330-20-7	Xylene (Total)		10	U
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

FELF-INF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5558.D
Level: (TRACE or LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5557A.D
Level: (TRACE/LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

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

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-02A
Sample wt/vol: ~5.00 (g/mL) ML Lab File ID: V1K5557A.D
Level: (TRACE/LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane		10
108-90-7	Chlorobenzene		10
100-41-4	Ethylbenzene		10
1330-20-7	Xylene (Total)		10
100-42-5	Styrene		10
75-25-2	Bromoform		10
98-82-8	Isopropylbenzene		10
79-34-5	1,1,2,2-Tetrachloroethane		10
541-73-1	1,3-Dichlorobenzene		10
106-46-7	1,4-Dichlorobenzene		10
95-50-1	1,2-Dichlorobenzene		10
96-12-8	1,2-Dibromo-3-chloropropane		10
120-82-1	1,2,4-Trichlorobenzene		10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

FELF-EFF

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5557A.D
Level: (TRACE or LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H0376

Mod. Ref No.: SDG No.: SH0376

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: H0376-03A

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V1K5565A.D

Level: (TRACE/LOW/MED) LOW

Date Received: 03/13/2009

% Moisture: not dec.

Date Analyzed: 03/17/2009

GC Column: DB-624

ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:

(uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0

(mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
			Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
79-20-9	Methyl acetate	10	U
75-09-2	Methylene chloride	10	U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U

EPA OLM

0016

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

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5565A.D
Level: (TRACE/LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: H0376-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5565A.D
Level: (TRACE or LOW/MED) LOW Date Received: 03/13/2009
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

V1PLCS

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H0376

Mod. Ref No.: SDG No.: SH0376

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: LCS-42341

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V1K5556.D

Level: (TRACE/LOW/MED) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 03/17/2009

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 5.0

(mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		43	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		54	
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		58	
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		57	
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0019

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

CLIENT SAMPLE NO.

V1PLCS

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-42341
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5556.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane		10
108-90-7	Chlorobenzene		61
100-41-4	Ethylbenzene		10
1330-20-7	Xylene (Total)		10
100-42-5	Styrene		10
75-25-2	Bromoform		10
98-82-8	Isopropylbenzene		10
79-34-5	1,1,2,2-Tetrachloroethane		10
541-73-1	1,3-Dichlorobenzene		10
106-46-7	1,4-Dichlorobenzene		10
95-50-1	1,2-Dichlorobenzene		10
96-12-8	1,2-Dibromo-3-chloropropane		10
120-82-1	1,2,4-Trichlorobenzene		10

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM

Case No.: H0376

Mod. Ref No.:

SDG No.: SH0376

Level: (TRACE or LOW) LOW

	CLIENT SAMPLE NO.	VDMC1 (TOL) #	VDMC2 (BFB) #	VDMC3 (DCE) #					TOT OUT
01	VBLK1P	108	105	98					0
02	V1PLCS	95	90	87					0
03	FELF-EFF	109	104	100					0
04	FELF-INF	104	100	99					0
05	TRIP BLANK	99	92	86					0
06	VHBLK1P	102	95	98					0

VDMC1 (TOL) = Toluene-d8

VDMC2 (BFB) = Bromofluorobenzene

VDMC3 (DCE) = 1,2-Dichloroethane-d4

QC LIMITS

(88-110)

(86-115)

(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.

V1PLCS

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H0376

Mod. Ref No.:

SDG No.: SH0376

Lab Sample ID: LCS-42341

LCS Lot No.:

Date Extracted: 03/17/2009

Date Analyzed (1): 03/17/2009

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
1,1-Dichloroethene	50.0000	0.0000	42.7400	85		61 - 145
Benzene	50.0000	0.0000	53.9466	108		76 - 127
Trichloroethene	50.0000	0.0000	58.0321	116		71 - 120
Toluene	50.0000	0.0000	57.0988	114		76 - 125
Chlorobenzene	50.0000	0.0000	60.9696	122		75 - 130

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

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBK1P

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Lab File ID: V1K5555.D Lab Sample ID: MB-42341
Instrument ID: V1
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 03/17/2009
Level: (TRACE or LOW/MED) LOW Time Analyzed: 09:43
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1PLCS	LCS-42341	V1K5556.D	10:20
02	FELF-EFF	H0376-02A	V1K5557A.D	11:23
03	FELF-INF	H0376-01A	V1K5558.D	11:50
04	TRIP BLANK	H0376-03A	V1K5565A.D	15:36
05	VHBLK1P	VHBLK1P	V1K5566.D	16:03

COMMENTS:

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

CLIENT SAMPLE NO.

VBK1P

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-42341
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5555.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0024

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

CLIENT SAMPLE NO.

VBLK1P

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-42341
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5555.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

VBLK1P

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-42341
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5555.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

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

CLIENT SAMPLE NO.

VHBLK1P

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H0376

Mod. Ref No.:

SDG No.: SH0376

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: VHBLK1P

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V1K5566.D

Level: (TRACE/LOW/MED) LOW

Date Received: 03/13/2009

% Moisture: not dec.

Date Analyzed: 03/17/2009

GC Column: DB-624

ID: 0.25

(mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume:

(uL)

Purge Volume: 5.0

(mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
67-64-1	Acetone		10	U
75-15-0	Carbon disulfide		10	U
79-20-9	Methyl acetate		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
156-59-2	cis-1,2-Dichloroethene		10	U
78-93-3	2-Butanone		10	U
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
110-82-7	Cyclohexane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
107-06-2	1,2-Dichloroethane		10	U
79-01-6	Trichloroethene		10	U
108-87-2	Methylcyclohexane		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		10	U
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0027

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

CLIENT SAMPLE NO.

VHBLK1P

Lab Name: MITKEM LABORATORIES

Contract:

Lab Code: MITKEM Case No.: H0376

Mod. Ref No.: SDG No.: SH0376

Matrix: (SOIL/SED/WATER) WATER

Lab Sample ID: VHBLK1P

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: V1K5566.D

Level: (TRACE/LOW/MED) LOW

Date Received: 03/13/2009

% Moisture: not dec.

Date Analyzed: 03/17/2009

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

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	Q
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

VHBLK1P

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: H0376 Mod. Ref No.: _____ SDG No.: SH0376
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: VHBLK1P
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V1K5566.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 03/17/2009
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.



* Metals *

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

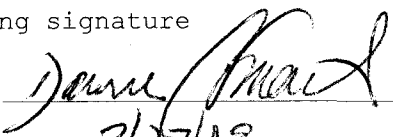
Lab Name: Mitkem Laboratories Contract: 99163.04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SH0376
SOW No.: ILM04.1

EPA Sample No.	Lab Sample ID
<u>FELF-EFF</u>	<u>H0376-02</u>
<u>FELF-EFFD</u>	<u>H0376-02DUP</u>
<u>FELF-EFFS</u>	<u>H0376-02MS</u>
<u>FELF-INF</u>	<u>H0376-01</u>
<u>FELF-INFD</u>	<u>H0376-01DUP</u>
<u>FELF-INFS</u>	<u>H0376-01MS</u>

Were ICP interelement corrections applied?	Yes/No	<u>YES</u>
Were background corrections applied?	Yes/No	<u>YES</u>
If yes-were raw data generated before application of background corrections?	Yes/No	<u>NO</u>

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature:  Name: Dawn E. Smart
Date: 3/27/09 Title: _____

COVER PAGE - IN

ILM04.1

0031

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1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FELF-EFF

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0376Matrix (soil/water): WATERLab Sample ID: H0376-02Level (low/med): MEDDate Received: 03/13/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1570			P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	30.7	B		P
7440-41-7	Beryllium	0.19	B		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	34300			P
7440-47-3	Chromium	2.8	B		P
7440-48-4	Cobalt	1.3	B		P
7440-50-8	Copper	3.5	B		P
7439-89-6	Iron	2260			P
7439-92-1	Lead	2.1	B		P
7439-95-4	Magnesium	11000			P
7439-96-5	Manganese	52.5			P
7439-97-6	Mercury	0.014	U		CV
7440-02-0	Nickel	3.5	B		P
7440-09-7	Potassium	3140	B		P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	0.50	U		P
7440-23-5	Sodium	8180			P
7440-28-0	Thallium	3.4	U		P
7440-62-2	Vanadium	3.0	B		P
7440-66-6	Zinc	35.0			P

Color Before COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments: _____

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FELF-INF

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0376Matrix (soil/water): WATERLab Sample ID: H0376-01Level (low/med): MEDDate Received: 03/13/2009% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7.4	U		P
7440-36-0	Antimony	2.2	U		P
7440-38-2	Arsenic	3.2	U		P
7440-39-3	Barium	69.4	B		P
7440-41-7	Beryllium	0.21	B		P
7440-43-9	Cadmium	0.35	B		P
7440-70-2	Calcium	88900			P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	4.9	B		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	13400			P
7439-92-1	Lead	2.7	B		P
7439-95-4	Magnesium	24600			P
7439-96-5	Manganese	2160			P
7439-97-6	Mercury	0.016	B		CV
7440-02-0	Nickel	5.6	B		P
7440-09-7	Potassium	6790			P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	2.3	B		P
7440-23-5	Sodium	56800			P
7440-28-0	Thallium	3.4	U		P
7440-62-2	Vanadium	1.7	B		P
7440-66-6	Zinc	17.4	B		P

Color Before COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments: _____

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3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-42466

FIMS1_090324D

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.039	B	0.170	B	0.037	B			0.030	B	

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3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-42473

OPTIMA2_090325B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	7.4	U	7.5	B	7.4	U	7.4	U	11.149	B	
Iron	0.5	B	3.9	B	2.5	B	4.6	B	13.826	B	

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3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-42473

OPTIMA3_090325A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Potassium	100.2	B	60.7	B	72.7	B			50.655	B	
Sodium	46.0	U	46.0	U	-47.4	B			-66.089	B	

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3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-42473

OPTIMA3_090325B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C		C	
Antimony	2.2	U	2.2	U	2.2	U	2.2	U	2.210	U			
Arsenic	3.2	U	3.2	U	3.2	U	3.2	U	3.210	U			
Barium	18.5	B	8.5	B	8.3	B	11.1	B	3.728	B			
Beryllium	0.5	B	0.4	B	0.3	B	0.7	B	0.169	B			
Cadmium	0.5	B	0.5	B	0.4	B	1.0	B	0.246	B			
Calcium	83.4	B	182.7	B	74.6	U	316.6	B	94.901	B			
Chromium	2.0	B	1.0	B	0.8	B	1.1	B	0.655	B			
Cobalt	4.8	B	2.4	B	2.1	B	3.0	B	1.033	B			
Copper	1.6	B	1.4	B	0.9	U	1.7	B	1.217	B			
Lead	1.9	U	1.9	U	1.9	U	1.9	U	1.910	U			
Magnesium	48.7	B	226.0	B	31.0	B	516.5	B	87.546	B			
Manganese	4.9	B	2.4	B	2.7	B	3.9	B	1.257	B			
Nickel	4.6	B	2.3	B	1.8	B	2.9	B	0.876	B			
Selenium	4.0	U	4.0	U	4.4	B	4.0	U	3.980	U			
Silver	3.9	B	1.9	B	1.2	B	2.1	B	2.579	B			
Thallium	3.4	U	3.4	U	3.4	U	3.4	U	3.350	U			
Vanadium	4.3	B	1.8	B	1.8	B	3.5	B	0.734	B			
Zinc	5.1	B	2.7	B	2.2	B	3.3	B	1.592	B			

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5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

FELF-EFFS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75-125	0.9942	0.0140 U	1.00	99.4		CV

Comments:

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5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

FELF-INFS

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2074.7438	7.3800 U	2000.00	103.7		P
Antimony	75-125	99.8427	2.2100 U	100.00	99.8		P
Arsenic	75-125	40.5449	3.2100 U	40.00	101.4		P
Barium	75-125	2073.4153	69.3623 B	2000.00	100.2		P
Beryllium	75-125	52.4727	0.2111 B	50.00	104.5		P
Cadmium	75-125	49.6259	0.3480 B	50.00	98.6		P
Chromium	75-125	207.2755	1.0604 B	200.00	103.1		P
Cobalt	75-125	510.2818	4.8576 B	500.00	101.1		P
Copper	75-125	257.6814	1.6018 B	250.00	102.4		P
Iron		14280.0748	13441.4674	1000.00	83.9		P
Lead	75-125	22.0578	2.6772 B	20.00	96.9		P
Manganese		2637.1790	2156.0206	500.00	96.2		P
Nickel	75-125	505.6071	5.5917 B	500.00	100.0		P
Selenium	75-125	61.6538	3.9800 U	50.00	123.3		P
Silver	75-125	53.0315	2.2782 B	50.00	101.5		P
Thallium	75-125	46.5763	3.3500 U	50.00	93.2		P
Vanadium	75-125	513.7313	1.7467 B	500.00	102.4		P
Zinc	75-125	506.3082	17.4298 B	500.00	97.8		P

Comments:

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EPA SAMPLE NO.

DUPLICATES

FELF-INFED

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		7.3800	U	7.3800	U			P
Antimony		2.2100	U	2.2100	U			P
Arsenic		3.2100	U	3.2100	U			P
Barium		69.3623	B	64.2622	B	7.6		P
Beryllium		0.2111	B	0.0633	B	107.7		P
Cadmium		0.3480	B	0.2100	U	200		P
Calcium		88872.0278		89438.1808		0.6		P
Chromium		1.0604	B	0.4891	B	73.7		P
Cobalt		4.8576	B	3.4521	B	33.8		P
Copper		1.6018	B	0.9100	U	200		P
Iron		13441.4674		13256.4486		1.4		P
Lead		2.6772	B	1.9100	U	200		P
Magnesium	5000.0	24560.1446		24337.7804		0.9		P
Manganese		2156.0206		2140.3563		0.7		P
Nickel		5.5917	B	4.8197	B	14.8		P
Potassium	5000.0	6785.3956		6856.2546		1		P
Selenium		3.9800	U	3.9800	U			P
Silver		2.2782	B	0.9067	B	86.1		P
Sodium		56835.7257		56667.1616		0.3		P
Thallium		3.3500	U	3.3500	U			P
Vanadium		1.7467	B	0.3900	U	200		P
Zinc		17.4298	B	13.4089	B	26.1		P

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6

EPA SAMPLE NO.

DUPLICATES

FELF-EFFD

Lab Name: Mitkem LaboratoriesContract: 99163.04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SH0376Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		0.0140	U	0.0140	U			CV

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LABORATORY CONTROL SAMPLE

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SH0376

Solid LCS Source:

LCS(D) ID:

Aqueous LCS Source:

LCS-42473

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9446.27	103.8						
Antimony	455.0	491.81	108.1						
Arsenic	455.0	498.64	109.6						
Barium	9100.0	9535.95	104.8						
Beryllium	227.0	246.76	108.7						
Cadmium	227.0	239.77	105.6						
Calcium	22700.0	23424.95	103.2						
Chromium	910.0	967.00	106.3						
Cobalt	2270.0	2377.18	104.7						
Copper	1130.0	1180.89	104.5						
Iron	4550.0	4907.27	107.9						
Lead	455.0	487.02	107.0						
Magnesium	22700.0	24228.12	106.7						
Manganese	2270.0	2449.25	107.9						
Nickel	2270.0	2394.03	105.5						
Potassium	22700.0	24955.29	109.9						
Selenium	455.0	492.90	108.3						
Silver	1130.0	1213.13	107.4						
Sodium	22700.0	24777.02	109.1						
Thallium	455.0	479.79	105.4						
Vanadium	2270.0	2331.65	102.7						
Zinc	2270.0	2404.21	105.9						

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9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

FELF-INF

Lab Name: Mitkem Laboratories

Contract: 99163.04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SH0376

Matrix (soil/water): WATER

Level (low/med): MED

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

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	7.38	U	36.90	U			P
Antimony	2.21	U	11.05	U			P
Arsenic	3.21	U	16.05	U			P
Barium	69.36	B	75.36		9		P
Beryllium	0.21	B	0.41		95		P
Cadmium	0.35	B	1.05	U	100		P
Calcium	88872.03		85206.78		4		P
Chromium	1.06	B	1.33		26		P
Cobalt	4.86	B	4.55		6		P
Copper	1.60	B	4.55	U	100		P
Iron	13441.47		14209.10		6		P
Lead	2.68	B	9.55	U	100		P
Magnesium	24560.14		25746.55		5		P
Manganese	2156.02		2294.15		6		P
Nickel	5.59	B	6.37		14		P
Potassium	6785.40		7095.01		5		P
Selenium	3.98	U	19.90	U			P
Silver	2.28	B	2.50	U	100		P
Sodium	56835.73		58883.34		4		P
Thallium	3.35	U	16.75	U			P
Vanadium	1.75	B	2.78		59		P
Zinc	17.43	B	18.80		8		P



*** Wet Chemistry ***

Mitkem Laboratories

Date: 18-Mar-09

Client: Earth Tech – AECOM

Client Sample ID: FELF-EFF

Lab ID: H0376-02

Project: Fort Edward Landfill

Collection Date: 03/12/09 10:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2540C -- TOTAL DISSOLVED SOLIDS							SM2540_TDS
Total Dissolved Solids	230		10	mg/L	1	03/17/2009 17:06	42328
SM 2540D -- TOTAL SUSPENDED SOLIDS							SM2540_TSS
Total Suspended Solids	ND		10	mg/L	1	03/17/2009 16:40	42329
SM 5530B-D -- PHENOLS by 4-Aminoantipyrine Method							SM5530_W
Phenolics, Total Recoverable	0.51		0.20	mg/L	1	03/17/2009 16:25	42355

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

0045

ANALYTICAL QC SUMMARY REPORT

CLIENT: Earth Tech - AECOM

Work Order: H0376

SM2540_TDS

Project: Fort Edward Landfill

SM 2540C -- TOTAL DISSOLVED SOLIDS

Sample ID: MB-42328	SampType: MBLK	TestCode: SM2540_TDS	Prep Date: 3/16/2009	Run ID: MANUAL_090316A				
Client ID: MB-42328	Batch ID: 42328	Units: mg/L	Analysis Date: 3/17/2009	SeqNo: 994602				
Analyte	Result	PQL	SPK Ref Val	SPK value	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids		ND	10					

Sample ID: LCS-42328	SampType: LCS	TestCode: SM2540_TDS	Prep Date: 3/16/2009	Run ID: MANUAL_090316A					
Client ID: LCS-42328	Batch ID: 42328	Units: mg/L	Analysis Date: 3/17/2009	SeqNo: 994603					
Analyte	Result	PQL	SPK Ref Val	SPK value	RPD Ref Val	%RPD	RPDLimit	Qual	
Total Dissolved Solids		560.0	10	557.0	0	101	80	120	0

0046

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

ANALYTICAL QC SUMMARY REPORT

CLIENT: Earth Tech - AECOM
Work Order: H0376
Project: Fort Edward Landfill

SM2540_TSS
SM 2540D -- TOTAL SUSPENDED SOLIDS

Sample ID: MB-42329	SampType: MBLK	TestCode: SM2540_TSS	Prep Date: 3/16/2009	Run ID: MANUAL_090316B							
Client ID: MB-42329	Batch ID: 42329	Units: mg/L	Analysis Date: 3/17/2009	SeqNo: 994624							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	ND	10									

Sample ID: LCS-42329	SampType: LCS	TestCode: SM2540_TSS	Prep Date: 3/16/2009	Run ID: MANUAL_090316B							
Client ID: LCS-42329	Batch ID: 42329	Units: mg/L	Analysis Date: 3/17/2009	SeqNo: 994625							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids	46.00	10	39.40	0	117	80	120	0			

0047

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Earth Tech – AECOM
Work Order: H0376
Project: Fort Edward Landfill

ANALYTICAL QC SUMMARY REPORT
SM5530_W
SM 5530B-D -- PHENOLS by 4-Aminocantipyrine Method

Sample ID: MB-42355	SampType: MBLK	TestCode: SM5530_W	Prep Date: 3/17/2009	Run ID: SPEC2_090317D						
Client ID: MB-42355	Batch ID: 42355	Units: mg/L	Analysis Date: 3/17/2009	SeqNo: 994648						
Analyte	Result	PQL	SPK Ref Val	SPK value	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	ND	0.20								

Sample ID: LCS-42355	SampType: LCS	TestCode: SM5530_W	Prep Date: 3/17/2009	Run ID: SPEC2_090317D						
Client ID: LCS-42355	Batch ID: 42355	Units: mg/L	Analysis Date: 3/17/2009	SeqNo: 994649						
Analyte	Result	PQL	SPK Ref Val	SPK value	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	0.3260	0.20	0	0.2900	112	80	120	0		

0048

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Last Page of Data Report