



January 13, 2008

JAN 16 2008

Mr. Gerard Burke, P.E.
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

**RE: Summary Letter Report for In-Situ Bioremediation Monitoring
NYSDEC Standby Contract W/A D004440-4.1
Chem Core – Site #9-15-176**

Dear Mr. Burke:

URS Corporation (URS) is pleased to present the New York State Department of Environmental Conservation (NYSDEC) with this *Summary Letter Report* for the application of Edible Oil Substrate (EOS™) in three (3) on-site infiltration galleries that were constructed during remedial activities and reapplication of EOS™ in the pilot study area at the above-referenced site (Figure 1).

1.0 EOS™ Application in Infiltration Galleries

On October 9, 2008, URS personnel completed the EOS™ application in the on-site infiltration galleries. Approximately 55 gallons (approximately 422 pounds) of concentrated EOS™ was mixed with 1,500 gallons of water obtained from the municipal water line supply at the treatment building and discharged into each of the three infiltration galleries. The EOS™ concentrate and water was mixed in a high-density polyethylene (HDPE) tank prior to gravity discharge into each infiltration gallery from the ground surface. No groundwater monitoring was performed as part of this task because groundwater monitoring is already being conducted as part of the treatment plant OM&M.

2.0 Reapplication of EOS™ in the Pilot Study Area

On October 10, eight wells within and near the pilot study area were resampled as a baseline prior to the reapplication of the EOS™. These wells include MW-8S, MW-8D, MW-12, MW-16, MW-18, MW-19 and two injection wells located on the east edge of the injection grid (IW-A2 and IW-A5) as depicted in Figure 2. Prior to groundwater sampling, the static groundwater level was measured at each monitoring well prior to purging and sample collection. A groundwater contour map for this date is included as Figure 3. Groundwater samples were collected using low-flow purging and sampling procedures. Water was purged from each well using a low-flow peristaltic pump operated at a discharge rate of less than one (1) liter per minute. Water quality parameter readings were recorded on low-flow purging logs provided in Attachment 1.

All samples were sent to Mitkem Laboratories (Warwick, RI) for analysis. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) following United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) OLM04.2, total and filtered iron (Fe) by USEPA CLP SOW ILM04.1, sulfate by Methods for the Chemical Analysis of Water and Wastes (MCAWW) Method 300.0, and total

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organic carbon (TOC) by Standard Methods for the Examination of Water and Wastewater (SM) Method SM5310B. The TOC analyses were subcontracted to RI Analytical Laboratories (Warwick, RI). Table 1 summarizes the analytical data. The Data Usability Summary Report (DUSR) is included as Attachment 2. A second sampling event is scheduled for early February 2008. Figure 4 depicts the contaminants detected above standards, criteria, and guidance values (SCGs) for the October 2008 sampling round.

On October 13 and 14, 2008, approximately 4.5 gallons of concentrated EOS™ (approximately 34.5 pounds) was mixed with 150 gallons of water and placed into each of the 24 injection wells via gravity discharge from the ground surface. Water was obtained from the municipal water line supply at the treatment building. The EOS™ dose was the same as was used during the pilot study (refer to Bioremediation Pilot Study Work Plan – URS, 2005).

URS appreciates assisting the Department with this project. Please call me if you have questions.

Sincerely,

URS CORPORATION



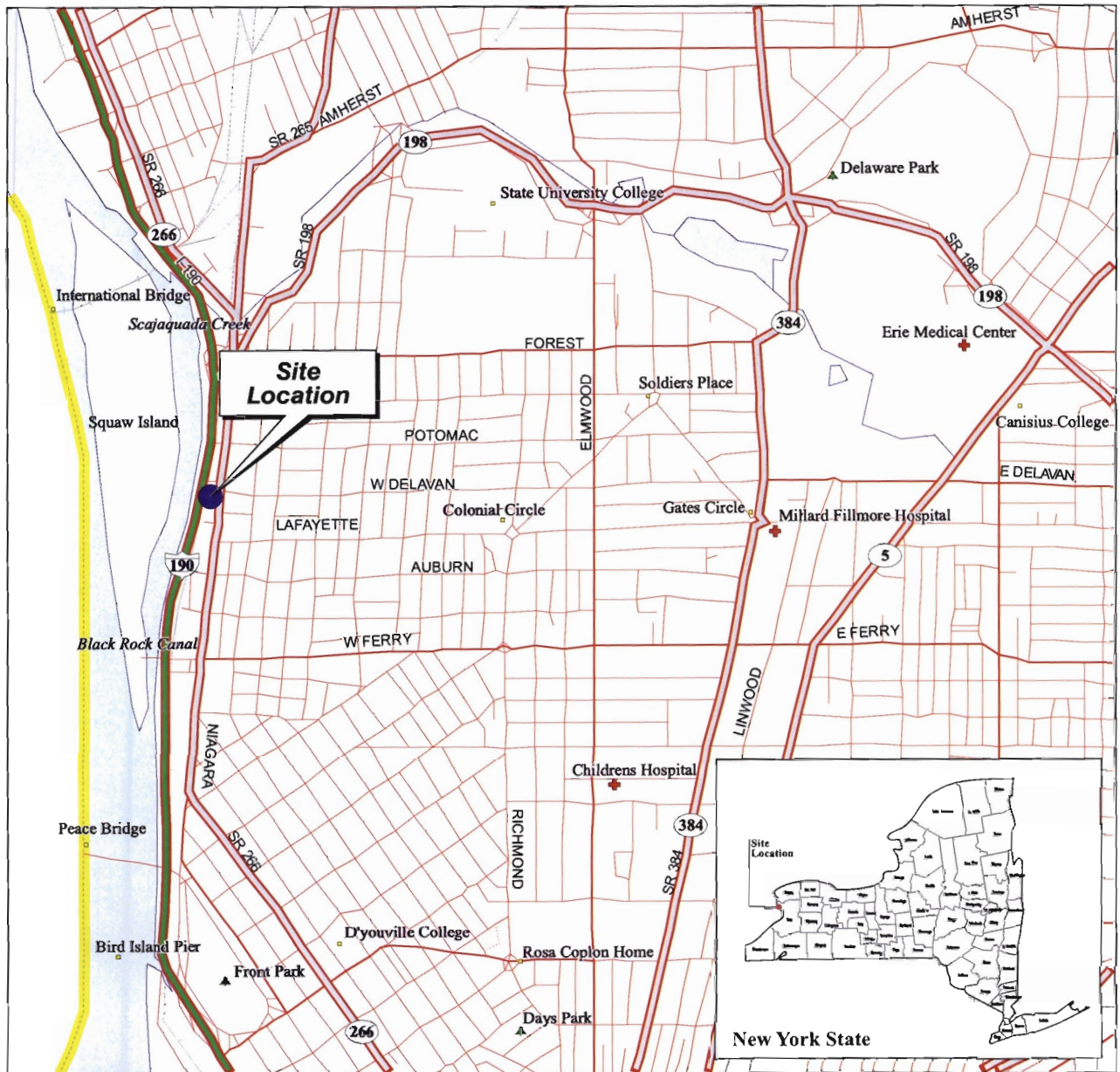
Michael Gutmann
Project Manager

Enclosures

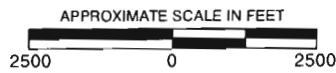
Figure 1	Site Location Map
Figure 2	Pilot Study Area Monitoring Well Locations
Figure 3	Potentiometric Surface of Shallow Bedrock Aquifer – October 10, 2008
Figure 4	Groundwater Contaminants Above SCGs (October 2008)
Table 1	Groundwater Analytical Results – October 2008
Attachment 1	Low-Flow Purge Logs – October 2008
Attachment 2	Data Usability Summary Report

cc: Craig Pawlewski, URS - Buffalo
File: 11174478.00000 (C-1)

FIGURES



© 1993 DeLorme Mapping

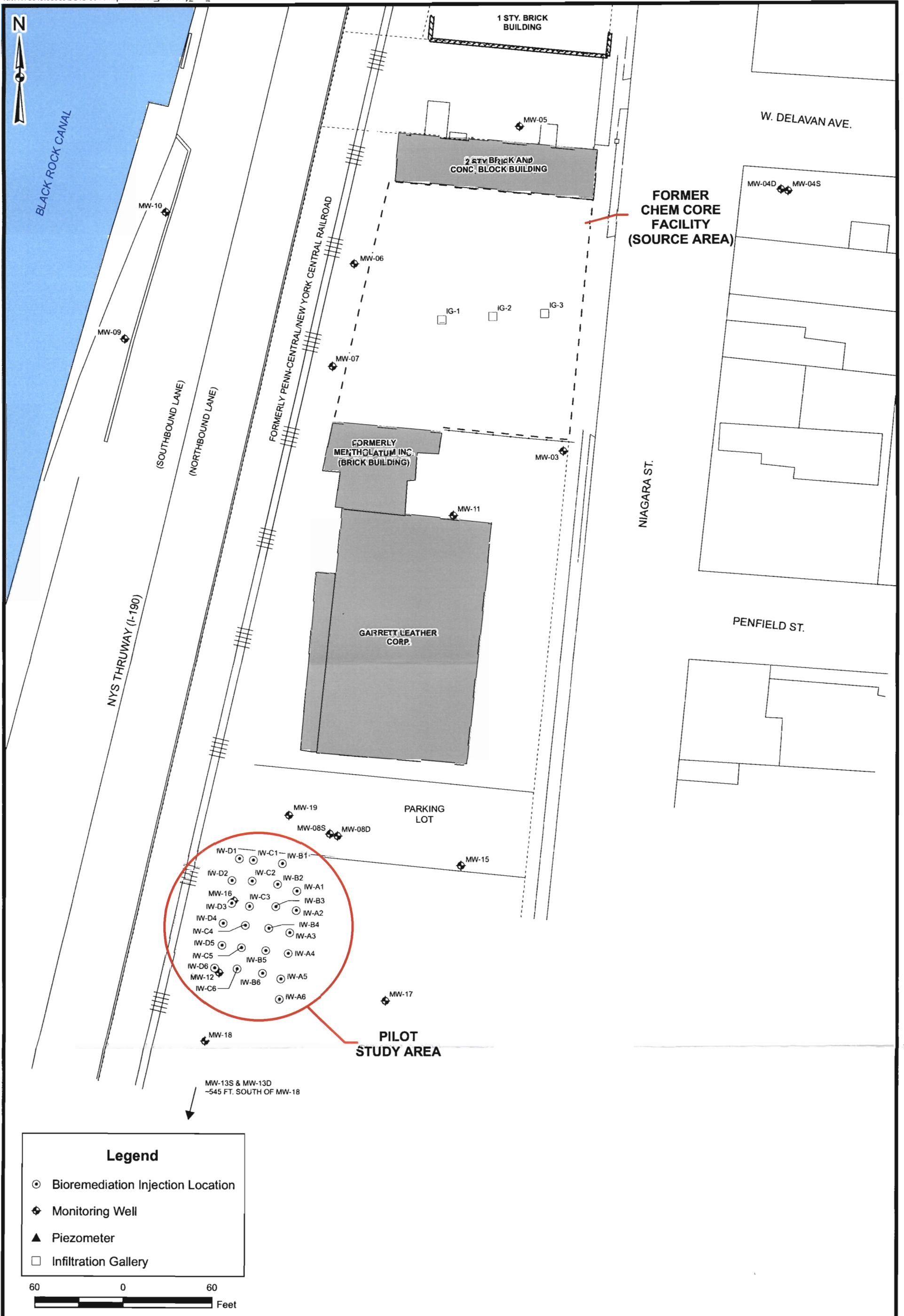


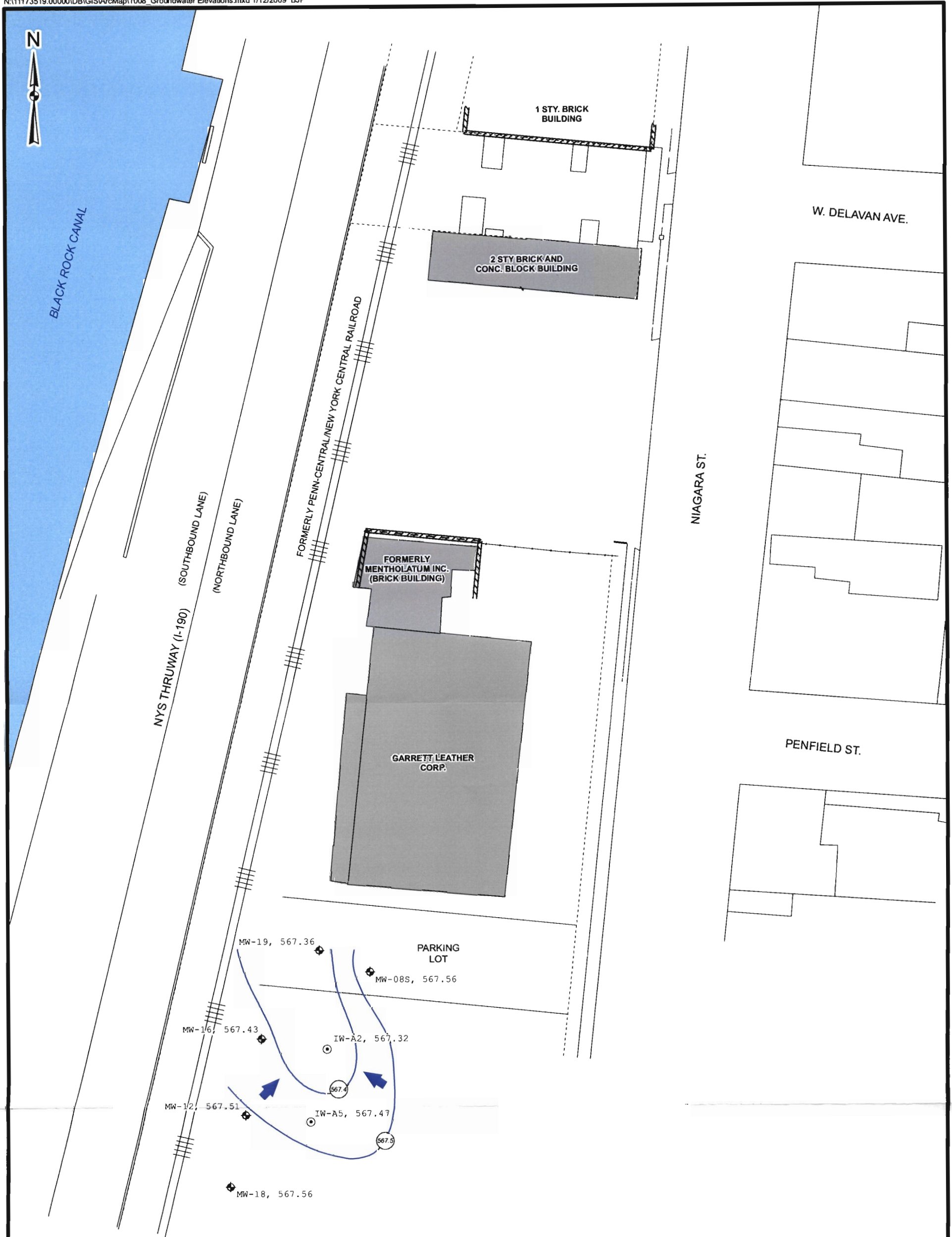
URS

CHEM-CORE
SITE LOCATION MAP

FIGURE 1

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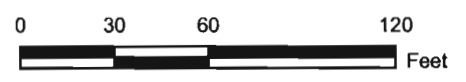


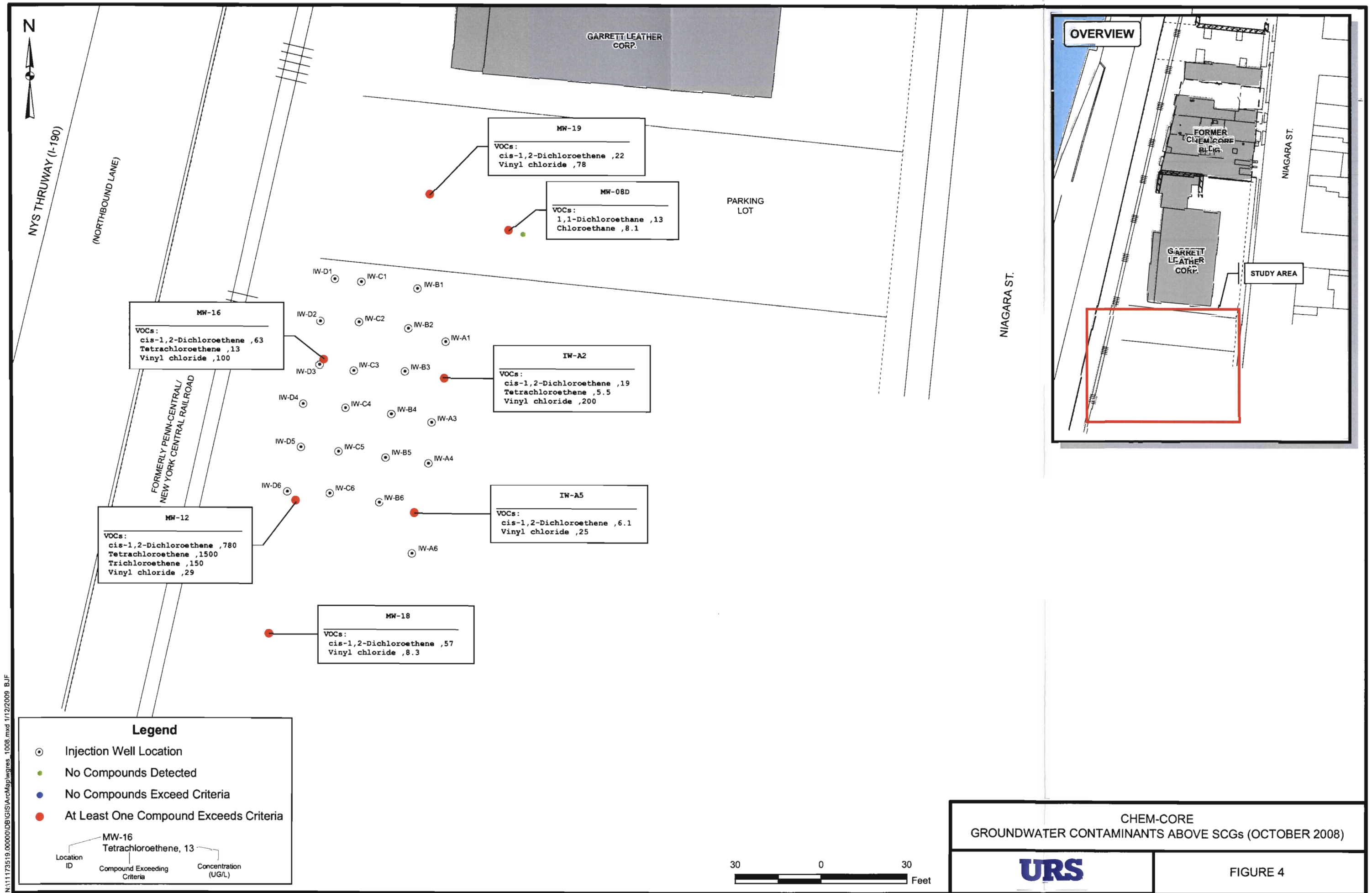
Legend

- ◆ Monitoring Well
- ⬇ Groundwater Flow Direction
- ⊞ Groundwater Extraction Well
- ⊙ Injection Well
- Groundwater Elevation Contour

MW-18, 567.56

Location ID Groundwater Elevation (ft amsl)





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TABLES

TABLE 1
GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2008
CHEM CORE - SITE #9-15-176

Location ID			IW-A2	IW-A5	MW-08D	MW-08S	MW-12
Sample ID			IW-A2-WG	IW-A5-WG	MW-8D-WG	MW-8S-WG	MW-12-WG
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/10/08	10/10/08	10/10/08	10/10/08	10/10/08
Parameter	Units	Criteria*					
Volatiles							
1,1-Dichloroethane	UG/L	5			13		
Chloroethane	UG/L	5			8.1 J		
cis-1,2-Dichloroethene	UG/L	5	19	6.1 J			780
Tetrachloroethene	UG/L	5	5.5 J	3.7 J			1,500
Trichloroethene	UG/L	5					150
Vinyl chloride	UG/L	2	200	25			29 J
Filtered Metals							
Iron	UG/L	300	4,330 J	1,520 J			302 J
Total Metals							
Iron	UG/L	300	5,280	1,850		382	4,830
Miscellaneous Parameters							
Sulfate (as SO ₄)	MG/L	250	77	120	700	250	63
Total Organic Carbon (TOC)	MG/L	-	30	28	10	6.2	3.1

*Criteria- NYSDEC TOGS (1 1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations June 1998 (includes April 2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown

 Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation

UG/L - Micrograms per liter.

MG/L - Milligrams per liter.

Only Detected Results Reported.

TABLE 1
GROUNDWATER ANALYTICAL RESULTS - OCTOBER 2008
CHEM CORE - SITE #9-15-176

Location ID			MW-16	MW-18	MW-19
Sample ID			MW-16-WG	MW-18-WG	MW-19-WG
Matrix			Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-
Date Sampled			10/10/08	10/10/08	10/10/08
Parameter	Units	Criteria*			
Volatiles					
1,1-Dichloroethane	UG/L	5			
Chloroethane	UG/L	5			
cis-1,2-Dichloroethene	UG/L	5	63	57	22
Tetrachloroethene	UG/L	5	13		3.4 J
Trichloroethene	UG/L	5			
Vinyl chloride	UG/L	2	100	8.3 J	78
Filtered Metals					
Iron	UG/L	300	3,980 J	598 J	4,360 J
Total Metals					
Iron	UG/L	300	7,040	1,860	4,840
Miscellaneous Parameters					
Sulfate (as SO ₄)	MG/L	250	130	75	100
Total Organic Carbon (TOC)	MG/L	-	4.1	2.8	4.7

*Criteria- NYSDEC TOGS (1 1 1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes April 2000 Addendum) Class GA.

Flags assigned during chemistry validation are shown

 Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

UG/L - Micrograms per liter.

MG/L - Milligrams per liter

Only Detected Results Reported.

ATTACHMENT 1

Low-Flow Purge Logs

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core Site: Chem Core Well I.D.: MW-08S

Date: 10/10/2008 Sampling Personnel: S.M. Company: URS Corporation

Purging/Sampling Device: Whale submersible pump Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 19.89 Depth to Well Bottom: 24.54 Well Diameter: 6 Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 26.4 Estimated Purge Volume (liters): 28

Sample ID: MW-08S-WG Sample Time: 0830 QA/QC: none

Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron

Ferrous Iron = 0.16 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
0800	6.90	14.8	1.410	1.42	15	-14	1000	
0802	7.03	14.8	1.410	0.88	10	-23	1000	
0804	7.24	15.0	1.410	0.89	5.3	-24	1000	
0806	7.30	15.0	1.410	0.97	3.4	-22	1000	
0808	7.32	15.0	1.410	0.99	2.8	-21	1000	
0810	7.34	15.0	1.410	1.01	2.1	-20	1000	
0812	7.37	15.1	1.410	1.01	2.0	-14	1000	
0814	7.39	15.1	1.410	1.03	1.9	-9	1000	
0816	7.45	15.1	1.410	1.03	1.1	-4	1000	
0818	7.48	15.2	1.410	1.12	0.0	-2	1000	
0820	7.50	15.2	1.410	1.07	0.0	2	1000	
0822	7.53	15.2	1.410	1.10	0.0	6	1000	
0824	7.54	15.2	1.410	1.13	0.0	10	1000	
0826	7.55	15.2	1.410	1.12	0.0	11	1000	
0828	7.56	15.2	1.410	1.15	0.0	13	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft (vol_{cyl} = $\pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core Site: Chem Core Well I.D.: MW-12

Date: 10/10/2008 Sampling Personnel: S.M. Company: URS Corporation

Purging/
Sampling Device: Whale submersible pump Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 28.20 Depth to Well Bottom: 35.90 Well Diameter: 6 Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 43.7 Estimated Purge Volume (liters): 50

Sample ID: MW-12-WG Sample Time: 1400 QA/QC: none

Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron

Ferrous Iron = 0.19 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1310	7.37	13.8	0.870	4.17	923	-53	1000	
1315	7.23	13.5	0.863	3.95	621	-24	1000	
1320	7.15	13.0	0.852	3.80	225	-7	1000	
1325	7.07	13.2	0.846	4.55	103	15	1000	
1330	7.03	13.3	0.848	4.74	94	11	1000	
1335	7.03	13.3	0.845	4.61	73	9	1000	
1340	7.02	13.3	0.843	4.59	53	12	1000	
1345	7.02	13.3	0.841	4.47	31	10	1000	
1350	7.02	13.3	0.840	4.39	42	9	1000	
1355	7.02	13.3	0.839	4.29	40	6	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft (vol_{cy} = πr²h)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core Site: Chem Core Well I.D.: MW-16

Date: 10/10/2008 Sampling Personnel: S.M. Company: URS Corporation

Purging/
Sampling
Device: Whale submersible pump Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 29.17 Depth to Well Bottom: 38.42 Well Diameter: 4 Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 22.8 Estimated Purge Volume (liters): 22

Sample ID: MW-16-WG Sample Time: 1435 QA/QC: none

Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron

Ferrous Iron = 2.30 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1410	7.09	13.3	1.500	0.88	536	-106	1000	
1412	7.01	13.1	1.620	0.79	230	-117	1000	
1414	7.01	13.2	1.660	0.82	220	-119	1000	
1416	7.01	13.2	1.820	0.79	193	-120	1000	
1418	7.03	13.2	1.960	0.75	167	-124	1000	
1420	7.08	13.2	2.180	0.70	116	-131	1000	
1422	7.09	13.2	2.200	0.70	93	-134	1000	
1424	7.09	13.3	2.230	0.70	61	-137	1000	
1426	7.11	13.3	2.260	0.68	45	-139	1000	
1428	7.12	13.3	2.250	0.66	43	-141	1000	
1430	7.13	13.3	2.240	0.67	37	-144	1000	
1432	7.13	13.4	2.250	0.67	44	-147	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES—0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;

4 inch diameter well = 2470 ml/ft (vol_{cy} = πr²h)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core Site: Chem Core Well I.D.: MW-18
 Date: 10/10/2008 Sampling Personnel: S.M. Company: URS Corporation

Purging/Sampling Device: Whale submersible pump Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 26.75 Depth to Well Bottom: 39.07 Well Diameter: 4 Screen Length:

Casing Type: PVC Volume in 1 Well Casing (liters): 30.4 Estimated Purge Volume (liters): 26

Sample ID: MW-18-WG Sample Time: 1300 QA/QC: none

Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron
Ferrous Iron = 0.36 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1230	7.82	12.2	0.980	2.54	389	-105	1000	
1232	7.71	12.2	0.970	1.17	281	-109	1000	
1234	7.58	12.2	0.970	0.97	193	-110	1000	
1236	7.52	12.2	0.940	0.88	155	-119	1000	
1238	7.50	12.2	0.940	0.83	67	-121	1000	
1240	7.49	12.2	0.930	0.89	59	-123	1000	
1242	7.48	12.2	0.920	0.88	48	-123	1000	
1244	7.48	12.2	0.900	0.86	47	-122	1000	
1246	7.48	12.1	0.682	0.80	37	-115	1000	
1248	7.47	12.1	0.683	0.79	38	-112	1000	
1250	7.46	12.1	0.685	0.76	33	-110	1000	
1252	7.46	12.1	0.685	0.72	26	-109	1000	
1254	7.45	12.1	0.686	0.79	27	-108	1000	
1256	7.45	12.1	0.688	0.81	21	-107	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core Site: Chem Core Well I.D.: MW-19
 Date: 10/10/2008 Sampling Personnel: S.M. Company: URS Corporation

Purging/Sampling Device: Whale submersible pump Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint
 Measuring Point: Below Top of Riser Initial Depth to Water: 17.34 Depth to Well Bottom: 27.75 Well Diameter: 4 Screen Length:
 Casing Type: PVC Volume in 1 Well Casing (liters): 25.7 Estimated Purge Volume (liters): 24

Sample ID: MW-19-WG Sample Time: 1025 QA/QC: MS/MSD
 Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron
Ferrous Iron = 5.40 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1000	8.08	16.2	3.130	1.61	351	-163	1000	
1002	7.66	16.2	3.180	0.96	296	-175	1000	
1004	7.62	16.2	3.160	0.88	224	-177	1000	
1006	7.58	16.3	3.150	0.82	169	-180	1000	
1008	7.54	16.3	3.020	0.80	101	-182	1000	
1010	7.55	16.3	2.750	0.79	71	-181	1000	
1012	7.56	16.4	2.550	0.83	53	-179	1000	
1014	7.53	16.4	2.450	0.82	56	-180	1000	
1016	7.51	16.4	2.460	0.81	36	-182	1000	
1018	7.48	16.4	2.550	0.79	31	-186	1000	
1020	7.48	16.4	2.280	0.79	24	-187	1000	
1022	7.46	16.4	2.620	0.77	20	-188	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft (vol_{cy} = πr²h)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core **Site:** Chem Core **Well I.D.:** IW-A2
Date: 10/10/2008 **Sampling Personnel:** S.M. **Company:** URS Corporation

Purging/Sampling Device: Whale submersible pump **Tubing Type:** HDPE **Pump/Tubing Inlet Location:** Screen midpoint
Measuring Point: Below Top of Riser **Initial Depth to Water:** 28.53 **Depth to Well Bottom:** 39.38 **Well Diameter:** 4 **Screen Length:** _____
Casing Type: PVC **Volume in 1 Well Casing (liters):** 26.8 **Estimated Purge Volume (liters):** 26

Sample ID: IW-A2-WG **Sample Time:** 1515 **QA/QC:** none

Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron

Ferrous Iron = 4.20 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1445	7.21	12.5	1.390	0.77	260	-90	1000	
1447	7.19	12.5	1.380	0.79	200	-90	1000	
1449	7.18	12.5	1.370	0.81	180	-93	1000	
1451	7.16	12.5	1.370	0.82	128	-95	1000	
1453	7.14	12.6	1.350	0.79	124	-94	1000	
1455	7.09	12.6	1.240	0.79	103	-95	1000	
1457	7.07	12.6	1.200	0.78	88	-95	1000	
1459	7.05	12.6	1.180	0.78	76	-94	1000	
1501	7.05	12.7	1.120	0.76	51	-96	1000	
1503	7.04	12.7	1.110	0.79	45	-97	1000	
1505	7.03	12.7	1.120	0.77	37	-97	1000	
1507	7.03	12.7	1.120	0.72	23	-99	1000	
1509	7.03	12.7	1.120	0.75	22	-99	1000	
1511	7.02	21.7	1.130	0.75	23	-100	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
 4 inch diameter well = 2470 ml/ft (vol_{cy} = πr²h)

Remarks:

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Chem Core Site: Chem Core Well I.D.: IW-A5

Date: 10/10/2008 Sampling Personnel: S.M. Company: URS Corporation

Purging/
Sampling
Device: Whale submersible pump Tubing Type: HDPE Pump/Tubing
Inlet
Location: Screen midpoint

Measuring Below Top of Initial Depth
Point: Riser to Water: 27.75 Depth to
Well Bottom: 38.83 Well
Diameter: 4 Screen
Length: _____

Casing
Type: PVC Volume in 1
Well Casing
(liters): 27.4 Estimated
Purge
Volume
(liters): 28

Sample ID: IW-A5-WG Sample
Time: 1600 QA/QC: none

Sample Parameters: TCL VOCs, TOC, Sulfate, Total Iron, Dissolved Iron

Ferrous Iron = 1.10 mg/L

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O ₂ (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
1530	7.26	12.5	0.928	1.09	543	-87	1000	
1532	7.26	12.5	0.914	0.93	124	-93	1000	
1534	7.25	12.7	0.908	0.75	58	-108	1000	
1536	7.10	12.6	0.909	0.76	51	-111	1000	
1538	7.10	12.6	0.906	0.78	55	-113	1000	
1540	7.11	12.6	0.905	0.77	49	-115	1000	
1542	7.14	12.7	0.902	0.73	46	-119	1000	
1544	7.13	12.7	0.897	0.71	37	-124	1000	
1546	7.10	12.7	0.895	0.71	44	-130	1000	
1548	7.10	12.7	0.891	0.72	41	-132	1000	
1550	7.10	12.8	0.868	0.71	30	-134	1000	
1552	7.10	21.8	0.884	0.70	32	-137	1000	
1554	7.10	12.8	0.883	0.71	35	138	1000	
1556	7.10	12.8	0.879	0.70	33	-140	1000	
1558	7.11	12.8	0.877	0.70	31	-141	1000	
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft;
4 inch diameter well = 2470 ml/ft (vol_{cy} = πr²h)

Remarks:

ATTACHMENT 2

Data Usability Summary Report

DATA USABILITY SUMMARY REPORT

**CHEM CORE SITE
SITE ID #9-15-176
BUFFALO, NEW YORK**

Analyses Performed by:

**MITKEM LABORATORIES, INC.
WARWICK, RHODE ISLAND**

Prepared by:

**URS CORPORATION
77 GOODELL STREET
BUFFALO, NY 14203**

NOVEMBER 2008

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TABLES (Following Text)

Table 1	Validated Groundwater Analytical Results
Table 2	Validated Field QC Analytical Results

ATTACHMENTS

Attachment A– Validated Form 1’s

Attachment B – Support Documentation

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation Draft DER-10 *Technical Guidance for Site Investigation and Remediation*, dated December 2002, Appendix 2B- Guidance for the Development of Data Usability Summary Reports. The data being evaluated are from the October 10, 2008 sampling of eight groundwater samples, one matrix spike/matrix spike duplicate (MS/MSD) pair, one equipment rinse blank, and one trip blank at the Chem Core site.

II. ANALYTICAL METHODOLOGIES

All samples were sent to Mitkem Laboratories (Warwick, RI) for analysis. The samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs) following United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) OLM04.2, total and filtered iron (Fe) by USEPA CLP SOW ILM04.1, sulfate by Methods for the Chemical Analysis of Water and Wastes (MCAWW) Method 300.0, and total organic carbon (TOC) by Standard Methods for the Examination of Water and Wastewater (SM) Method SM5310B. The TOC analyses were subcontracted to RI Analytical Laboratories (Warwick, RI). The equipment rinse blank and trip blank were analyzed for TCL VOCs only.

A limited data validation was performed following the guidelines in USEPA Region II CLP *Organics Data Review and Preliminary Review*, SOP HW-6, Revision 14, September 2006 and *Validation of Metals for the CLP Program*, SOP HW-2, Revision 13, September 2006. The limited validation included: a review of holding times and completeness of all required deliverables; a review of quality control (QC) results (blanks, instrument tunings, calibration standards, duplicate analyses, and laboratory control sample recoveries) to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Qualifications applied to the data include 'J' (estimated concentration) and 'U' (non-detect).

Qualifications applied to the data include 'J' (estimated concentration) and 'U' (non-detect). Definitions of USEPA Region II data qualifiers are presented at the end of this text. A summary of the validated analytical results are presented on Tables 1 and 2. Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

III. DATA DELIVERABLE COMPLETENESS

Full deliverable data packages were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

IV. PRESERVATION/HOLDING TIMES/SAMPLE RECEIPT

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC). All samples were analyzed within the required holding times.

V. NON-CONFORMANCES

- Laboratory Blanks

Iron was detected in the laboratory method blank at a concentration above the method detection limit (MDL). The results for total Fe in sample MW-08D and filtered Fe in samples MW-08D and MW-08S were between the MDL and contract required detection limit (CRDL) and also less than five times the value detected in the method blank. The results for Fe in these samples were elevated to the CRDL and reported as non-detect ('U').

Documentation supporting the qualification of data (i.e., Form 3) is presented in Attachment B.

- Serial Dilution

The percent difference of filtered Fe in the serial dilution performed on sample MW-19 was greater than the QC limit (i.e., %D>10%). The detected results for filtered Fe in samples IW-A2, IW-A5, MW-12, MW-16, MW-18, and MW-19 were qualified 'J'.

Documentation supporting the qualification of data (i.e., Form 9) is presented in Attachment B.

VI. SAMPLE RESULTS AND REPORTING

All quantitation/reporting limits were reported in accordance with method requirements and were adjusted for sample volume and dilution factors. The VOC fraction of sample MW-12 was diluted prior to analysis due to elevated concentrations of target compounds. The quantitation limits reported for the non-detect compounds are the lowest achievable at the dilution utilized.

VII. SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J' (estimated) are considered conditionally usable. All other sample results are usable as reported. URS does not recommend the recollection of any samples at this time.

Prepared By: Ann Marie Kropovitch, Chemist



Date:

11/20/08

Reviewed By: James J. Lehnen, Senior Chemist



Date:

11/21/08

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

- U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- B – The analyte was detected in the sample at a concentration greater than the instrument detection limit, but less than the quantitation limit.
- D – The positive value is the result of an analysis at a secondary dilution factor.

TABLE 1
VALIDATED GROUNDWATER ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		IW-A2	IW-A5	MW-08D	MW-08S	MW-12
Sample ID		IW-A2-WG	IW-A5-WG	MW-8D-WG	MW-8S-WG	MW-12-WG
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		10/10/08	10/10/08	10/10/08	10/10/08	10/10/08
Parameter	Units					
Volatiles						
1,1,1-Trichloroethane	UG/L	10 U	10 U	10 U	10 U	100 U
1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 U	10 U	100 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	10 U	10 U	10 U	10 U	100 U
1,1,2-Trichloroethane	UG/L	10 U	10 U	10 U	10 U	100 U
1,1-Dichloroethane	UG/L	10 U	10 U	13	10 U	100 U
1,1-Dichloroethene	UG/L	10 U	10 U	10 U	10 U	100 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U	10 U	100 U
1,2-Dibromo-3-chloropropane	UG/L	10 U	10 U	10 U	10 U	100 U
1,2-Dibromoethane	UG/L	10 U	10 U	10 U	10 U	100 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	100 U
1,2-Dichloroethane	UG/L	10 U	10 U	10 U	10 U	100 U
1,2-Dichloropropane	UG/L	10 U	10 U	10 U	10 U	100 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	100 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U	10 U	100 U
2-Butanone	UG/L	10 U	10 U	10 U	10 U	100 U
2-Hexanone	UG/L	10 U	10 U	10 U	10 U	100 U
4-Methyl-2-pentanone	UG/L	10 U	10 U	10 U	10 U	100 U
Acetone	UG/L	10 U	10 U	10 U	10 U	100 U
Benzene	UG/L	10 U	10 U	10 U	10 U	100 U
Bromodichloromethane	UG/L	10 U	10 U	10 U	10 U	100 U
Bromoform	UG/L	10 U	10 U	10 U	10 U	100 U
Bromomethane	UG/L	10 U	10 U	10 U	10 U	100 U
Carbon disulfide	UG/L	10 U	10 U	10 U	10 U	100 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 11/14/08
CHECKED BY: JLL 11/19/08

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		IW-A2	IW-A5	MW-08D	MW-08S	MW-12
Sample ID		IW-A2-WG	IW-A5-WG	MW-8D-WG	MW-8S-WG	MW-12-WG
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		10/10/08	10/10/08	10/10/08	10/10/08	10/10/08
Parameter	Units					
Volatiles						
Carbon tetrachloride	UG/L	10 U	10 U	10 U	10 U	100 U
Chlorobenzene	UG/L	10 U	10 U	10 U	10 U	100 U
Chloroethane	UG/L	10 U	10 U	8.1 J	10 U	100 U
Chloroform	UG/L	10 U	10 U	10 U	10 U	100 U
Chloromethane	UG/L	10 U	10 U	10 U	10 U	100 U
cis-1,2-Dichloroethene	UG/L	19	6.1 J	10 U	10 U	780
cis-1,3-Dichloropropene	UG/L	10 U	10 U	10 U	10 U	100 U
Cyclohexane	UG/L	10 U	10 U	10 U	10 U	100 U
Dibromochloromethane	UG/L	10 U	10 U	10 U	10 U	100 U
Dichlorodifluoromethane	UG/L	10 U	10 U	10 U	10 U	100 U
Ethylbenzene	UG/L	10 U	10 U	10 U	10 U	100 U
Isopropylbenzene	UG/L	10 U	10 U	10 U	10 U	100 U
Methyl acetate	UG/L	10 U	10 U	10 U	10 U	100 U
Methyl tert-butyl ether	UG/L	10 U	10 U	10 U	10 U	100 U
Methylcyclohexane	UG/L	10 U	10 U	10 U	10 U	100 U
Methylene chloride	UG/L	10 U	10 U	10 U	10 U	100 U
Styrene	UG/L	10 U	10 U	10 U	10 U	100 U
Tetrachloroethene	UG/L	5.5 J	3.7 J	10 U	10 U	1,500
Toluene	UG/L	10 U	10 U	10 U	10 U	100 U
trans-1,2-Dichloroethene	UG/L	10 U	10 U	10 U	10 U	100 U
trans-1,3-Dichloropropene	UG/L	10 U	10 U	10 U	10 U	100 U
Trichloroethene	UG/L	10 U	10 U	10 U	10 U	150
Trichlorofluoromethane	UG/L	10 U	10 U	10 U	10 U	100 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 11/14/08
CHECKED BY: JLL 11/19/08

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		IW-A2	IW-A5	MW-08D	MW-08S	MW-12
Sample ID		IW-A2-WG	IW-A5-WG	MW-8D-WG	MW-8S-WG	MW-12-WG
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		10/10/08	10/10/08	10/10/08	10/10/08	10/10/08
Parameter	Units					
Volatiles						
Vinyl chloride	UG/L	200	25	10 U	10 U	29 J
Xylene (Total)	UG/L	10 U	10 U	10 U	10 U	100 U
Filtered Metals						
Iron	UG/L	4,330 J	1,520 J	100 U	100 U	302 J
Total Metals						
Iron	UG/L	5,280	1,850	100 U	382	4,830
Miscellaneous Parameters						
Sulfate (as SO ₄)	MG/L	77	120	700	250	63
Total Organic Carbon (TOC)	MG/L	30	28	10	6.2	3.1

Flags assigned during chemistry validation are shown.

MADE BY: AMK 11/14/08
 CHECKED BY: JJJ 11/19/08

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		MW-16	MW-18	MW-19
Sample ID		MW-16-WG	MW-18-WG	MW-19-WG
Matrix		Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-
Date Sampled		10/10/08	10/10/08	10/10/08
Parameter	Units			
Volatiles				
1,1,1-Trichloroethane	UG/L	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	10 U	10 U	10 U
1,1,2-Trichloroethane	UG/L	10 U	10 U	10 U
1,1-Dichloroethane	UG/L	10 U	10 U	10 U
1,1-Dichloroethene	UG/L	10 U	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U	10 U
1,2-Dibromo-3-chloropropane	UG/L	10 U	10 U	10 U
1,2-Dibromoethane	UG/L	10 U	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U	10 U
1,2-Dichloroethane	UG/L	10 U	10 U	10 U
1,2-Dichloropropane	UG/L	10 U	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U	10 U
2-Butanone	UG/L	10 U	10 U	10 U
2-Hexanone	UG/L	10 U	10 U	10 U
4-Methyl-2-pentanone	UG/L	10 U	10 U	10 U
Acetone	UG/L	10 U	10 U	10 U
Benzene	UG/L	10 U	10 U	10 U
Bromodichloromethane	UG/L	10 U	10 U	10 U
Bromoform	UG/L	10 U	10 U	10 U
Bromomethane	UG/L	10 U	10 U	10 U
Carbon disulfide	UG/L	10 U	10 U	10 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 11/14/08
 CHECKED BY: JJJ 11/19/08

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		MW-16	MW-18	MW-19
Sample ID		MW-16-WG	MW-18-WG	MW-19-WG
Matrix		Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-
Date Sampled		10/10/08	10/10/08	10/10/08
Parameter	Units			
Volatiles				
Carbon tetrachloride	UG/L	10 U	10 U	10 U
Chlorobenzene	UG/L	10 U	10 U	10 U
Chloroethane	UG/L	10 U	10 U	10 U
Chloroform	UG/L	10 U	10 U	10 U
Chloromethane	UG/L	10 U	10 U	10 U
cis-1,2-Dichloroethene	UG/L	63	57	22
cis-1,3-Dichloropropene	UG/L	10 U	10 U	10 U
Cyclohexane	UG/L	10 U	10 U	10 U
Dibromochloromethane	UG/L	10 U	10 U	10 U
Dichlorodifluoromethane	UG/L	10 U	10 U	10 U
Ethylbenzene	UG/L	10 U	10 U	10 U
Isopropylbenzene	UG/L	10 U	10 U	10 U
Methyl acetate	UG/L	10 U	10 U	10 U
Methyl tert-butyl ether	UG/L	10 U	10 U	10 U
Methylcyclohexane	UG/L	10 U	10 U	10 U
Methylene chloride	UG/L	10 U	10 U	10 U
Styrene	UG/L	10 U	10 U	10 U
Tetrachloroethene	UG/L	13	10 U	3.4 J
Toluene	UG/L	10 U	10 U	10 U
trans-1,2-Dichloroethene	UG/L	10 U	10 U	10 U
trans-1,3-Dichloropropene	UG/L	10 U	10 U	10 U
Trichloroethene	UG/L	10 U	10 U	10 U
Trichlorofluoromethane	UG/L	10 U	10 U	10 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 11/14/08
 CHECKED BY: JLL 11/19/08

Detection Limits shown are MDL

TABLE 1
VALIDATED GROUNDWATER ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		MW-16	MW-18	MW-19
Sample ID		MW-16-WG	MW-18-WG	MW-19-WG
Matrix		Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-
Date Sampled		10/10/08	10/10/08	10/10/08
Parameter	Units			
Volatiles				
Vinyl chloride	UG/L	100	8.3 J	78
Xylene (Total)	UG/L	10 U	10 U	10 U
Filtered Metals				
Iron	UG/L	3,980 J	598 J	4,360 J
Total Metals				
Iron	UG/L	7,040	1,860	4,840
Miscellaneous Parameters				
Sulfate (as SO ₄)	MG/L	130	75	100
Total Organic Carbon (TOC)	MG/L	4.1	2.8	4.7

Flags assigned during chemistry validation are shown.

MADE BY: AMK 11/14/08
 CHECKED BY: JJJ 11/19/08

Detection Limits shown are MDL

TABLE 2
VALIDATED FIELDQC ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-101008	TB-101008
Matrix		Groundwater	Groundwater
Depth Interval (ft)		-	-
Date Sampled		10/10/08	10/10/08
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Volatiles			
1,1,1-Trichloroethane	UG/L	10 U	10 U
1,1,1,2-Tetrachloroethane	UG/L	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/L	10 U	10 U
1,1,2-Trichloroethane	UG/L	10 U	10 U
1,1-Dichloroethane	UG/L	10 U	10 U
1,1-Dichloroethene	UG/L	10 U	10 U
1,2,4-Trichlorobenzene	UG/L	10 U	10 U
1,2-Dibromo-3-chloropropane	UG/L	10 U	10 U
1,2-Dibromoethane	UG/L	10 U	10 U
1,2-Dichlorobenzene	UG/L	10 U	10 U
1,2-Dichloroethane	UG/L	10 U	10 U
1,2-Dichloropropane	UG/L	10 U	10 U
1,3-Dichlorobenzene	UG/L	10 U	10 U
1,4-Dichlorobenzene	UG/L	10 U	10 U
2-Butanone	UG/L	10 U	10 U
2-Hexanone	UG/L	10 U	10 U
4-Methyl-2-pentanone	UG/L	10 U	10 U
Acetone	UG/L	10 U	10 U
Benzene	UG/L	10 U	10 U
Bromodichloromethane	UG/L	10 U	10 U
Bromoform	UG/L	10 U	10 U
Bromomethane	UG/L	10 U	10 U
Carbon disulfide	UG/L	10 U	10 U

Flags assigned during chemistry validation are shown.

MADE BY: AKL 11/14/08
 CHECKED BY: AKL 11/14/08

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELDQC ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-101008	TB-101008
Matrix		Groundwater	Groundwater
Depth Interval (ft)		-	-
Date Sampled		10/10/08	10/10/08
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Volatiles			
Carbon tetrachloride	UG/L	10 U	10 U
Chlorobenzene	UG/L	10 U	10 U
Chloroethane	UG/L	10 U	10 U
Chloroform	UG/L	10 U	10 U
Chloromethane	UG/L	10 U	10 U
cis-1,2-Dichloroethene	UG/L	10 U	10 U
cis-1,3-Dichloropropene	UG/L	10 U	10 U
Cyclohexane	UG/L	10 U	10 U
Dibromochloromethane	UG/L	10 U	10 U
Dichlorodifluoromethane	UG/L	10 U	10 U
Ethylbenzene	UG/L	10 U	10 U
Isopropylbenzene	UG/L	10 U	10 U
Methyl acetate	UG/L	10 U	10 U
Methyl tert-butyl ether	UG/L	10 U	10 U
Methylcyclohexane	UG/L	10 U	10 U
Methylene chloride	UG/L	10 U	10 U
Styrene	UG/L	10 U	10 U
Tetrachloroethene	UG/L	10 U	10 U
Toluene	UG/L	10 U	10 U
trans-1,2-Dichloroethene	UG/L	10 U	10 U
trans-1,3-Dichloropropene	UG/L	10 U	10 U
Trichloroethene	UG/L	10 U	10 U
Trichlorofluoromethane	UG/L	10 U	10 U

Flags assigned during chemistry validation are shown.

MADE BY: *[Signature]* 11/14/08
 CHECKED BY: *[Signature]* 11/19/08

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELDQC ANALYTICAL RESULTS
OCTOBER 2008
CHEM-CORE SITE

Location ID		FIELDQC	FIELDQC
Sample ID		EB-101008	TB-101008
Matrix		Groundwater	Groundwater
Depth Interval (ft)		-	-
Date Sampled		10/10/08	10/10/08
Parameter	Units	Equipment Blank (1-1)	Trip Blank (1-1)
Volatiles			
Vinyl chloride	UG/L	10 U	10 U
Xylene (Total)	UG/L	10 U	10 U

Flags assigned during chemistry validation are shown

MADE BY: *[Signature]* 11/14/08
 CHECKED BY: *[Signature]* 11/14/08

Detection Limits shown are PQL

ATTACHMENT A

VALIDATED FORM 1's

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

EPA SAMPLE NO.

IW-A2-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-07A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1867.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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		200	
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		19	
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		5.5	J
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0074

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

EPA SAMPLE NO.

IW-A2-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-07A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1867.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA OLM

0075

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

EPA SAMPLE NO.

IW-A2-WG

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-07A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1867.D
Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
% Moisture: not dec. Date Analyzed: 10/16/2008
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

EPA SAMPLE NO.

IW-A5-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-08A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1868.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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		25	
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		6.1	J
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		3.7	J
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0083

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

EPA SAMPLE NO.

IW-A5-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-08A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1868.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

IW-A5-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-08A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1868.D
 Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-8D-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-02A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1862.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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		8.1	J
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		13	
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

0030

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

EPA SAMPLE NO.

MW-8D-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-02A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1862.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-8D-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-02A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1862.D
 Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-8S-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-01A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1861.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

0024

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

EPA SAMPLE NO.
MW-8S-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-01A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1861.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-8S-WG

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1861.D
Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
% Moisture: not dec. Date Analyzed: 10/16/2008
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 _i		

¹EPA-designated Registry Number.

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

EPA SAMPLE NO.

MW-12-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-04A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1864.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0
 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		100	U
74-87-3	Chloromethane		100	U
75-01-4	Vinyl chloride		29	J
74-83-9	Bromomethane		100	U
75-00-3	Chloroethane		100	U
75-69-4	Trichlorofluoromethane		100	U
75-35-4	1,1-Dichloroethene		100	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		100	U
67-64-1	Acetone		100	U
75-15-0	Carbon disulfide		100	U
79-20-9	Methyl acetate		100	U
75-09-2	Methylene chloride		100	U
156-60-5	trans-1,2-Dichloroethene		100	U
1634-04-4	Methyl tert-butyl ether		100	U
75-34-3	1,1-Dichloroethane		100	U
156-59-2	cis-1,2-Dichloroethene		780	
78-93-3	2-Butanone		100	U
67-66-3	Chloroform		100	U
71-55-6	1,1,1-Trichloroethane		100	U
110-82-7	Cyclohexane		100	U
56-23-5	Carbon tetrachloride		100	U
71-43-2	Benzene		100	U
107-06-2	1,2-Dichloroethane		100	U
79-01-6	Trichloroethene		150	
108-87-2	Methylcyclohexane		100	U
78-87-5	1,2-Dichloropropane		100	U
75-27-4	Bromodichloromethane		100	U
10061-01-5	cis-1,3-Dichloropropene		100	U
108-10-1	4-Methyl-2-pentanone		100	U
108-88-3	Toluene		100	U
10061-02-6	trans-1,3-Dichloropropene		100	U
79-00-5	1,1,2-Trichloroethane		100	U
127-18-4	Tetrachloroethene		1500	
591-78-6	2-Hexanone		100	U
124-48-1	Dibromochloromethane		100	U

EPA OLM

0047

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

EPA SAMPLE NO.

MW-12-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-04A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1864.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0
 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		100	U
108-90-7	Chlorobenzene		100	U
100-41-4	Ethylbenzene		100	U
1330-20-7	Xylene (Total)		100	U
100-42-5	Styrene		100	U
75-25-2	Bromoform		100	U
98-82-8	Isopropylbenzene		100	U
79-34-5	1,1,2,2-Tetrachloroethane		100	U
541-73-1	1,3-Dichlorobenzene		100	U
106-46-7	1,4-Dichlorobenzene		100	U
95-50-1	1,2-Dichlorobenzene		100	U
96-12-8	1,2-Dibromo-3-chloropropane		100	U
120-82-1	1,2,4-Trichlorobenzene		100	U

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

EPA SAMPLE NO.

MW-12-WG

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1864.D
Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
% Moisture: not dec. Date Analyzed: 10/16/2008
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0
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

EPA SAMPLE NO.

MW-16-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-05A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1865.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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		100	
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		63	
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		13	
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0057

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

EPA SAMPLE NO.
MW-16-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-05A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1865.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-16-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-05A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1865.D
 Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-18-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-06A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1866.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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		8.3	J
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		57	
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

0066

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

EPA SAMPLE NO.
MW-18-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-06A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1866.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-18-WG

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-06A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1866.D
Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
% Moisture: not dec. Date Analyzed: 10/16/2008
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 ₁		

¹EPA-designated Registry Number.

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

EPA SAMPLE NO.

MW-19-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-03A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1863.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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		78	
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		22	
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		3.4	J
591-78-6	2-Hexanone		10	U
124-48-1	Dibromochloromethane		10	U

EPA OLM

0038

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

EPA SAMPLE NO.

MW-19-WG

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-03A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1863.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

MW-19-WG

Lab Name: MITKEM LABORATORIES Contract: _____

Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1863.D

Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008

% Moisture: not dec. Date Analyzed: 10/16/2008

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

EPA SAMPLE NO.

EB-101008

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-09A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1869.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

0092

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

EPA SAMPLE NO.
EB-101008

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-09A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1869.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

EB-101008

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-09A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1869.D
Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
% Moisture: not dec. Date Analyzed: 10/16/2008
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

EPA SAMPLE NO.

TB-101008

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-10A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1870.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

0098

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

EPA SAMPLE NO.
TB-101008

Lab Name: MITKEM LABORATORIES Contract: _____
 Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-10A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1870.D
 Level: (TRACE/LOW/MED) LOW Date Received: 10/11/2008
 % Moisture: not dec. Date Analyzed: 10/16/2008
 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

EPA SAMPLE NO.

TB-101008

Lab Name: MITKEM LABORATORIES Contract: _____
Lab Code: MITKEM Case No.: _____ Mod. Ref No.: _____ SDG No.: MG1790
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: G1790-10A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V5K1870.D
Level: (TRACE or LOW/MED) LOW Date Received: 10/11/2008
% Moisture: not dec. Date Analyzed: 10/16/2008
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.

INORGANIC ANALYSIS DATA SHEET

IW-A2-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790

Matrix (soil/water): WATER Lab Sample ID: G1790-07

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	5280			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

INORGANIC ANALYSIS DATA SHEET

IW-A2-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-07

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	4330		<u>5</u>	P

OK
11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

INORGANIC ANALYSIS DATA SHEET

IW-A5-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790
 Matrix (soil/water): WATER Lab Sample ID: G1790-08
 Level (low/med): MED Date Received: 10/11/2008
 % Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1850			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____
 Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

INORGANIC ANALYSIS DATA SHEET

IW-A5-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-08

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1520		<u>15</u>	P

*dup
11/13/08*

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-8D-WG

Lab Name: Mitkem Laboratories

Contract: 11174478.50

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MG1790

Matrix (soil/water): WATER

Lab Sample ID: G1790-02

Level (low/med): MED

Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	<u>100</u> 48.5	<u>/</u>	<u>0</u>	P

Clear
11/13/08

Color Before COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

TOTAL

INORGANIC ANALYSIS DATA SHEET

MW-8D-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-02

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	<u>100</u> 31.3	<u>✓</u>	<u>✓</u>	<u>P</u>

Handwritten: 11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

INORGANIC ANALYSIS DATA SHEET

MW-8S-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790

Matrix (soil/water): WATER Lab Sample ID: G1790-01

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	382			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

INORGANIC ANALYSIS DATA SHEET

MW-8S-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-01

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	<u>100</u> 55.9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

OK
11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

INORGANIC ANALYSIS DATA SHEET

MW-12-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790

Matrix (soil/water): WATER Lab Sample ID: G1790-04

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	4830			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-12-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-04

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	302		<i>FS</i>	P

OK
11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-16-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790

Matrix (soil/water): WATER Lab Sample ID: G1790-05

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	7040			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-16-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-05

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	3980		<u>3</u>	P

OK
11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW-18-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790

Matrix (soil/water): WATER Lab Sample ID: G1790-06

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1860			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

INORGANIC ANALYSIS DATA SHEET

MW-18-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-06

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	598.		<i>FS</i>	P

OK
11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

INORGANIC ANALYSIS DATA SHEET

MW-19-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790

Matrix (soil/water): WATER Lab Sample ID: G1790-03

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	4840			P

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

TOTAL

INORGANIC ANALYSIS DATA SHEET

MW-19-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

Matrix (soil/water): WATER Lab Sample ID: G1790-03

Level (low/med): MED Date Received: 10/11/2008

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	4360		<u>7.5</u>	P

Q448
11/13/08

Color Before COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

DISSOLVED

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation

Client Sample ID: IW-A2-WG

Lab ID: G1790-07

Project: ChemCore

Collection Date: 10/10/08 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate		77		5.0		10/16/2008 16:04	39363

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

0246

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation
Client Sample ID: IW-A5-WG
Lab ID: G1790-08

Project: ChemCore
Collection Date: 10/10/08 16:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	120		5.0	mg/L	1	10/16/2008 16:16	39363

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

0247

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation

Client Sample ID: MW-8D-WG

Lab ID: G1790-02

Project: ChemCore

Collection Date: 10/10/08 9:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	700		50	mg/L		10/10/17/2008 11:06	39363

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

0241

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation
Client Sample ID: MW-8S-WG
Lab ID: G1790-01

Project: ChemCore
Collection Date: 10/10/08 9:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	250		25	mg/L	5	10/17/2008 10:54	39363

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

0240

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation

Client Sample ID: MW-12-WG

Lab ID: G1790-04

Project: ChemCore

Collection Date: 10/10/08 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	63		5.0	mg/L	1	10/16/2008 15:29	39363

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

0243

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation

Client Sample ID: MW-16-WG

Lab ID: G1790-05

Project: ChemCore

Collection Date: 10/10/08 14:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	130		5.0	mg/L	1	10/16/2008 15:41	39363

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

0244

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation

Client Sample ID: MW-18-WG

Lab ID: G1790-06

Project: ChemCore

Collection Date: 10/10/08 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	75		5.0	mg/L	1	10/16/2008 15:53	39363

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

0245

Mitkem Laboratories

Date: 03-Nov-08

Client: URS Corporation
Client Sample ID: MW-19-WG
Lab ID: G1790-03

Project: ChemCore
Collection Date: 10/10/08 10:25

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							E300IC_W
Sulfate	100		5.0	mg/L	1	10/16/2008 14:54	39363

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

0242

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation

Client Sample ID: IW-A2-WG

Lab ID: G1790-07

Project: ChemCore

Collection Date: 10/10/08 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W
Organic Carbon, Total	30		0.50	mg/L		11/04/2008 0:00	SUBBED

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

0324

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation

Client Sample ID: IW-A5-WG

Lab ID: G1790-08

Project: ChemCore

Collection Date: 10/10/08 16:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W
Organic Carbon, Total	28		0.50	mg/L	1	11/04/2008 0:00	SUBBED

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

0325

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation
Client Sample ID: MW-8D-WG
Lab ID: G1790-02

Project: ChemCore
Collection Date: 10/10/08 9:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W
Organic Carbon, Total		10		0.50 mg/L		11/04/2008 0:00	SUBBED

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

0319

Mitekem Laboratories

Date: 06-Nov-08

Client: URS Corporation
Client Sample ID: MW-8S-WG
Lab ID: G1790-01

Project: ChemCore
Collection Date: 10/10/08 9:50

Analyses	Result Qual	RL Units	DF Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion				SM5310B_TOC_W
Organic Carbon, Total	6.2 /	0.50 mg/L	1 11/04/2008 0:00	SUBBED

Handwritten signature and date: 11/20/08

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

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation
Client Sample ID: MW-12-WG
Lab ID: G1790-04

Project: ChemCore
Collection Date: 10/10/08 14:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W
Organic Carbon, Total	3.1		0.50	mg/L		11/04/2008 0:00	SUBBED

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

0321

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation

Client Sample ID: MW-16-WG

Lab ID: G1790-05

Project: ChemCore

Collection Date: 10/10/08 14:35

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W
Organic Carbon, Total	4.1	J	0.50	mg/L		11/04/2008 0:00	SUBBED

Handwritten signature and date: 11/04/08

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

0322

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation

Client Sample ID: MW-18-WG

Lab ID: G1790-06

Project: ChemCore

Collection Date: 10/10/08 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W
Organic Carbon, Total	2.8		0.50	mg/L		11/04/2008 0:00	SUBBED

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

6323

Mitkem Laboratories

Date: 06-Nov-08

Client: URS Corporation

Client Sample ID: MW-19-WG

Lab ID: G1790-03

Project: ChemCore

Collection Date: 10/10/08 10:25

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID	
SM 5310B TOC -- TOTAL ORGANIC CARBON by Combustion							SM5310B_TOC_W	
Organic Carbon, Total	4.7	/		0.50		mg/L	111/04/2008 0:00	SUBBED

Handwritten signature and date: 10/10/08

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

ATTACHMENT B

SUPPORT DOCUMENTATION

CHAIN OF CUSTODY RECORD

URS

PROJECT NO.
11174478.50000

SITE NAME
CHEM CORP

SAMPLERS (PRINT/SIGNATURE)
S. McCABE

TESTS
 TOC VOL -
 TOC
 SULFATE
 TONNE
 Iron
 Dissolved
 Iron

LAB Mitten

COOLER 1 of 1

PAGE 1 of 1

DELIVERY SERVICE: FedEx AIRBILL NO. 964045474284

BOTTLE TYPE AND PRESERVATIVE

LOCATION IDENTIFIER DATE TIME COMP/GRAB SAMPLE ID MATRIX

TOTAL NO. OF CONTAINERS

40m, HCL
 40m, HCL
 250ml
 4°C
 250ml
 HNO₃
 250ml
 HNO₃

REMARKS

SAMPLE TYPE
 BEGINNING DEPTH (IN FEET)
 ENDING DEPTH (IN FEET)
 FIELD LOT NO. # (FRIMS)

01	mw-8S	10/10/08	830	G	mw-8S-W6	WG	7	2	2	1	1	1						
02	mw-8D	10/10/08	950	G	mw-8D-W6	WG	7	2	2	1	1	1						
03	mw-19	10/10/08	1025	G	mw-19-W6	WG	7	2	2	1	1	1						
03	mw-19	10/10/08	1025	G	mw-19-W6-MS	WG	7	2	2	1	1	1						
03	mw-19	10/10/08	1025	G	mw-19-W6-MSD	WG	7	2	2	1	1	1						
04	mw-12	10/10/08	1400	G	mw-12-W6	WG	7	2	2	1	1	1						
05	mw-16	10/10/08	1435	G	mw-16-W6	WG	7	2	2	1	1	1						
06	mw-18	10/10/08	1300	G	mw-18-W6	WG	7	2	2	1	1	1						
07	IW-AZ	10/10/08	1515	G	IW-AZ-W6	WG	7	2	2	1	1	1						
08	IW-A5	10/10/08	1600	G	IW-A5-W6	WG	7	2	2	1	1	1						
09	EQUIPMENT BLANK	10/10/08	1440	G	EB-101008	WQ	4	2	2									
10	TRIP BLANK	10/10/08		G	TB-101008	WQ	2	2										

MATRIX CODES

AA - AMBIENT AIR
 SE - SEDIMENT
 SH - HAZARDOUS SOLID WASTE
 SL - SLUDGE
 WP - DRINKING WATER
 WW - WASTE WATER
 WG - GROUND WATER
 SO - SOIL
 DC - DRILL CUTTINGS
 WL - LEACHATE
 GS - SOIL GAS
 WC - DRILLING WATER
 WO - OCEAN WATER
 WS - SURFACE WATER
 WQ - WATER FIELD QC
 LH - HAZARDOUS LIQUID WASTE
 LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES

TB# - TRIP BLANK
 SD# - MATRIX SPIKE DUPLICATE
 RB# - RINSE BLANK
 FR# - FIELD REPLICATE
 N# - NORMAL ENVIRONMENTAL SAMPLE
 MS# - MATRIX SPIKE
 (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE 10/10/08	TIME 1745	RECEIVED BY (SIGNATURE) <i>[Signature]</i>	DATE 10/10/08	TIME 9:10	SPECIAL INSTRUCTIONS Samples Stored & Shipped on Ice. Contact Ann Marie Kesperich w/ any Questions 76-923-1137
RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE) <i>[Signature]</i>	DATE 10/10/08	TIME 9:10	

Distribution: Original accompanies shipment, copy to coordinator field files

4C

SDG Narrative

Mitkem Laboratories submit the enclosed data package in response to URS Corporation's Chem Core project. Under this deliverable, analysis results are presented for ten aqueous samples that were received on October 14, 2008. Analyses were performed per specifications in the project's contract and the chain of custody forms. Following the narrative is the Mitkem Work Order for cross-referencing sample client ID with laboratory sample ID.

The analyses were performed according to NYSDEC ASP protocols (2000 update) and reported per NYSDEC ASP requirement for Category B deliverable with the exception of sulfate and total organic carbon. The analytical result for sulfate is reported in the Mitkem format with supporting raw data.

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. 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.

The aqueous samples were acid preserved; pH <2.

Surrogate recovery: recoveries were within the QC limits.

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

Matrix spike/matrix spike duplicate: duplicate matrix spikes were performed on sample MW-19-WG. Spike recoveries and replicate RPDs were within the QC limits.

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

3. Metals Analysis (Total):

The metals analysis results are reported in two sub-SDGs, MG1790 and MG1790D. The total metals analysis results are reported in SDG MG1790 and the dissolved metals analysis results are reported in SDG MG1790D. The raw data for both sub-SDGs may be found following Form 14 of SDG MG1790D.

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

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

Matrix spike: matrix spike was performed on sample MW-19-WG. Spike recovery was not within the QC limits. The spike recovery for iron 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: duplicate analysis was performed on sample MW-19-WG. Replicate RPDs were within the QC limits.

Sample analysis: serial dilution was performed on sample MW-19-WG. Percent difference was within the QC. No other unusual observation was made for the analysis.

4. Metals Analysis (Dissolved):

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

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

Matrix spike: matrix spike was performed on sample MW-19-WG. Spike recovery was not within the QC limits. The spike recovery for iron 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: duplicate analysis was performed on sample MW-19-WG. Replicate RPDs were within the QC limits.

Sample analysis: serial dilution was performed on sample MW-19-WG. Percent difference was not within the QC limits. Iron is flagged with an "E" on the data report forms. No other unusual observation was made for the analysis.

5. Sulfate Analysis:

Results for the sulfate analysis is included following the blue section divider after the metals section of the data report.

Matrix spike/matrix spike duplicate: duplicate matrix spikes were performed on sample W-19WG. Spike recovery and replicate RPD were within the QC limits.

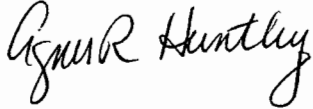
Sample analysis: no unusual observation was made for the analysis.

6. Total Organic Carbon Analysis:

Due to instrumentation issues, the total organic carbon analysis was performed by sub-contract laboratory RI Analytical Laboratories of Warwick, RI. Per discussions with the client, the unpreserved bottle received for the sulfate analysis was preserved with sulfuric acid. Sample EB-101008 could not be analyzed for total organic carbon. An unpreserved plastic bottle was not received for this sample. The sub-contract laboratory can only analyze TOC samples preserved the sulfuric acid.

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 that reads "Agnes R. Huntley". The signature is written in a cursive style with a large initial "A" and "H".

Agnes Huntley
CLP Project Manager
11/07/08

U.S. EPA - CLP

3

BLANKS

Lab Name: Mitkem Laboratories

Contract: 11174478.50000

Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: MG1790

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-39566

OPTIMA3_081027B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank	
	C	M	1	C	2	C	3	C	M	
Iron	5.5	U	5.5	U	5.5	U	5.5	U	15.492	B

ICP SERIAL DILUTIONS

MW-19-WG

Lab Name: Mitkem Laboratories Contract: 11174478.50

Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: MG1790D

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			
Iron	4356.01		5157.56		18	E	P