Groundwater Sampling and Analysis Report
August 2008 Sampling Event

Former EMCA Site
Mamaroneck, New York

Prepared for:

Rohm and Haas
Corporate Remediation Group

Prepared by:

URS
77 Goodell Street
Buffalo, New York 14203

October 2008

G4378A

FORMER EMCA SITE

SITE NO. 360025

MAMARONECK, NEW YORK

GROUNDWATER SAMPLING AND ANALYSIS REPORT

AUGUST 2008 SAMPLING EVENT

Prepared for:

ROHM AND HAAS COMPANY

Submitted by:

URS CORPORATION

77 Goodell Street

Buffalo, New York 14203

OCTOBER 2008

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

Appendix A	Low Flow Groundwater Purging/Sampling Logs
Appendix B	Data Usability Summary Report

1.0 INTRODUCTION

This report presents the results of groundwater monitoring conducted on August 12, 2008 at the former EMCA site located in Mamaroneck, New York (Figure 1). The semi-annual sampling and analyses of groundwater at this site is detailed in the Draft Operation Maintenance and Monitoring Plan (URS 2007b); the monitoring program generates data used to monitor the effectiveness of remedial actions performed at the site from 2003 to 2007.

The pilot program conducted in 2003, the interim remedial measure in 2004, and the supplemental injection event in 2007 involved the injections of food-grade emulsified soybean oil and sodium lactate into groundwater to stimulate anaerobic biodegradation and the reductive dechlorination of 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113; CAS No. 76-13-1) in site groundwater. This was the seventh groundwater sampling event since the interim remedial measure in 2004 and the second following the supplemental injection event in 2007.

2.0 GROUNDWATER SAMPLING AND ANALYSIS

Groundwater samples were collected from a total of six monitoring wells using low-flow purging and sampling procedures. Static groundwater level measurements were taken prior to purging and sampling. Field purging and sampling logs are presented in Appendix A.

Chain-of-custody was initiated immediately after the groundwater samples were collected and was maintained through shipment to the laboratory. Laboratory analyses were performed for the following parameters:

Parameter	Analytical Method
Freon 113	USEPA CLP OLM 04.3
Freon 123a	USEPA CLP OLM 04.3
Freon 1113	USEPA CLP OLM 04.3
Methane	RSK-175
Sulfate	375.4

3.0 RESULTS

Groundwater level data are presented in Table 1 and a groundwater elevation contour map is shown on Figure 2. Surface water level gauging locations WS-01, WS-02 and WS-03 were unable to be found and were assumed to be washed away or removed. As found during previous sampling events, groundwater flow was generally northwestward towards the Sheldrake River.

Groundwater monitoring results for the current event are provided in Table 2. Historical groundwater analytical results are presented on Table 3. Laboratory data sheets and a data usability summary report for the August 2008 results are provided in Appendix B. Freon 113, 123a and 1113 concentrations are shown in plan view on Figure 3 and the trend plots are presented for Freon 113 (Figure 4 and 5), Freon 123a (Figure 6), sulfate (Figure 7), methane (Figure 8), dissolved oxygen (Figure 9) and oxidation-reduction potential (Figure 10). Dissolved oxygen and oxidation-reduction potential were measured in the field by real-time instrumentation. An obstruction was found in well MW-07 at 9.97 feet below ground surface making it impossible to set the sampling depth at the midpoint of the saturated screen. Thus, the sampling depth was set at 9 feet below ground surface and a minimum of 5 well volumes was purged before sampling occurred.

4.0 DATA ASSESSMENT

The groundwater analytical data collected in August 2008 is the second set of data collected following the supplemental injection of food-grade emulsified soybean oil and sodium lactate on August 13, 2007. The previous round of groundwater sampling occurred after the injection on February 28, 2008. These results are presented in the previous Groundwater Sampling and Analysis Report (URS 2008). The groundwater analytical results for the August 2008 sampling event indicate that Freon 113 concentrations were either below the remedial goal of 5 µg/L or not detected at five of the six wells sampled. A Freon 113 concentration above 5 µg/L was noted only at MW-02 (700 µg/L), decreasing from 830 J µg/L in the February 2008 event.

Freon 123a and Freon 1113 are the expected reductive dechlorination daughter products of Freon 113. Minor fluctuations were seen in the concentrations of both compounds compared

to the previous sampling round. Freon 123a, which holds one less chlorine than Freon 113, decreased in all wells except MW-07, where it increased between February 2008 and August 2008 from 0.9 J µg/L to 16 µg/L.

Overall, little change was seen in Freon 1113 concentrations. Freon 1113, which holds two less chlorines than Freon 113, increased from previous concentrations at MW-02 (120 J µg/L to 160 µg/L) and MW-07 (92 µg/L to 170 µg/L). Concentrations decreased at MW-03 (13 J µg/L to 10 µg/L), MW-04 (1.0 J µg/L to not-detected), and MW-06 (8.0 J µg/L to 4.0 J µg/L). Concentrations remained the same at GZ-06 at not-detected.

The August 2008 sulfate concentrations increased at all wells except MW-04 where it remained the same at not-detected. Conversely, methane concentrations decreased at all locations. These two trends indicate diminishing reducing (diminishing anaerobic) conditions site-wide.

Dissolved oxygen concentrations have fluctuated widely since December 2005, but most recently, concentration dropped to 0 mg/L in all wells except GZ-06 (0.91 mg/L). Dissolved oxygen concentrations were expected to drop to near zero following injection (as was the case following the November 2004 IRM injection).

Oxidation-reduction potentials fluctuated slightly in all wells from the previous event, falling to between –102 to –167 millivolts.

5.0 CONCLUSIONS

The data trends generally show a continuing positive impact of the August 2007 supplemental injection event. Freon 113 concentrations decreased in wells across the site, with the exception of MW-07. The trending of the Freon 113 daughter products Freon 123a and Freon 1113 was mixed. However, this is expected following injection, as daughter products are created as the parent is reduced and the daughter products are then in turn reduced.

Methane concentrations decreased across the site, while sulfate, which is a competing electron acceptor with Freon, increased in all site wells except MW-04. These changes in

methane and sulfate concentrations indicate that there are diminishing reducing conditions present and that the August 2007 supplemental injection may be nearing its limit of effectiveness.

Oxidation-reduction potentials fluctuated in all wells. Following the IRM injection in November 2004 (a period of strong Freon reduction), oxidation-reduction potentials in site wells except GZ-06 were observed to fall to approximately –135 to –155 millivolts. Currently, the oxidation-reduction potentials in site wells (excluding GZ-06) appear to have a larger range (-117 to –167 millivolts). The anaerobic conditions were the strongest at MW-03 and MW-07.

Dissolved oxygen concentrations were measured to be zero at all locations except GZ-06. This indicates continued favorable conditions for anaerobic biodegradation at the site; however the strength may be weakening as indicated by the results of the methane and sulfate analyses.

Reductions in Freon concentrations as a result of the August 2007 supplemental injection appear to be the greatest and longest-lasting at GZ-06, MW-06 and MW-03. The EOS injection product is advertised to last 1-3 years. Assuming the EOS product is not completely depleted and anaerobic conditions persist, contaminant reduction will continue at a rate greater than what would occur under unaltered groundwater conditions. However, the methane and sulfate results indicate that the impact of the August 2007 supplemental injection is diminishing.

6.0 FUTURE ACTIVITIES

The next routine groundwater-monitoring event is planned for February 2009. Contaminant levels and indicator parameters will be evaluated for evidence of further progress toward the remedial objectives.

REFERENCES

URS Inc., 2005. *Groundwater Sampling and Analysis Report, May 2005 Sampling Event, Former EMCA Site, Site No. 360025, Mamaroneck, New York.* August.

URS Inc., 2006a. *Groundwater Sampling and Analysis Report, December 2005 Sampling Event, Former EMCA Site, Site No. 360025, Mamaroneck, New York.* March.

URS Inc., 2006b. *Groundwater Sampling and Analysis Report, August 2006 Sampling Event, Former EMCA Site, Site No. 360025, Mamaroneck, New York.* October.

URS Inc., 2007a. *Groundwater Sampling and Analysis Report, February 2007 Sampling Event, Former EMCA Site, Site No. 360025, Mamaroneck, New York.* April.

URS Inc., 2007b. *Operation, Maintenance and Monitoring Plan (Draft), Former EMCA Site, Site No. 360025, Mamaroneck, New York.* March.

URS Inc., 2007c. *Groundwater Sampling and Analysis Report, August 2007 Sampling Event & Summary of Supplemental Injection Event, Former EMCA Site, Site No. 360025, Mamaroneck, New York.* October.

URS Inc., 2008. *Groundwater Sampling and Analysis Report, February 2008 Sampling Event, Former EMCA Site, Site No 360025, Mamaroneck, New York.* May

TABLES

TABLE 1
GROUNDWATER ELEVATION MEASUREMENTS (August 2008)
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location	Measuring Point Elevation (ft.)	Depth to Water (ft.)	Water Surface Elevation (ft.)
GZ-03[1]	*102.71*	8.59	*94.12*
GZ-06	101.55	7.73	93.82
MW-01	99.22	5.68	93.54
MW-02	99.18	5.98	93.20
MW-03	99.35	6.17	93.18
MW-04[1]	*98.61*	5.50	*93.11*
MW-05	98.14	5.10	93.04
MW-06	ND	6.20	ND
MW-07	ND	6.28	ND

Notes:

1) The riser and protective casing are damaged at monitoring well **GZ-03**.
Well **MW-04** is damaged, pushed up ~2" above ground surface. These (italicized) water surface elevations are not included in the Groundwater Elevation Contour Map (Figure 2).

2) ND = Not Determined

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-06	MW-02	MW-03	MW-03	MW-04
Sample ID		20080812GZ06V10N	20080812MW02V10N	20080812MW03V10FD	20080812MW03V10N	20080812MW04V08N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		08/12/08	08/12/08	08/12/08	08/12/08	08/12/08
Parameter	Units			Field Duplicate (1-1)		
Volatiles						
Chlorotrifluoroethene (Freon-1113)	UG/L	10 U	160	10	10	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	700	10 U	10 U	10 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	38 J	1.0 J	1.0 J	10 U
Dissolved Gases						
Methane	UG/L	880	6,200	10,000	8,400	290
Miscellaneous Parameters						
Sulfate	MG/L	28.1	47.9	30.0	28.1	5 U
Field Parameter						
Dissolved Oxygen	MG/L	0.91	0 U	NA	0 U	0 U
Oxidation Reduction Potential	mV	-102	-119	NA	-149	-126
pH	S.U.	6.31	6.40	NA	6.36	6.65
Specific Conductance	MS/CM	1.59	2.14	NA	1.69	0.531
Temperature	DEG C	17.5	18.9	NA	17.8	21.3
Turbidity	NTU	18	3	NA	2	2

Flags assigned during chemistry validation are shown.

U - Non-Detect
J - Analyte is reported below the PQL at an estimated concentration.
NA - Not Analyzed
MADE BY: __PRF_09/11/08___ CHKD BY: __GEK_09/10/08___

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:46:29 PM
[LOGDATE] = #08/12/08# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD'

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-07
Sample ID		20080812MW06V13N	20080812MW07V09N
Matrix		Groundwater	Groundwater
Depth Interval (ft)		-	-
Date Sampled		08/12/08	08/12/08
Parameter	**Units**		
Volatiles			
Chlorotrifluoroethene (Freon-1113)	UG/L	4.0 J	170
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	3.0 J
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	16
Dissolved Gases			
Methane	UG/L	12,000	5,600
Miscellaneous Parameters			
Sulfate	MG/L	17.8	5.6
Field Parameter			
Dissolved Oxygen	MG/L	0 U	0 U
Oxidation Reduction Potential	mV	-117	-167
pH	S.U.	6.37	6.48
Specific Conductance	MS/CM	1.47	1.99
Temperature	DEG C	17.0	17.3
Turbidity	NTU	5	25

Flags assigned during chemistry validation are shown.

U - Non-Detect
J - Analyte is reported below the PQL at an estimated concentration.
NA - Not Analyzed
MADE BY: __PRF_09/11/08___ CHKD BY: __GEK_09/10/08___

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:46:29 PM
[LOGDATE] = #08/12/08# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD'

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-03	GZ-06	GZ-06	GZ-06	GZ-06
Sample ID		20070801GZ-03V11N	GZ06_52103	GZ06	GZ06-091703	GZ-06-121803
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		08/01/07	05/21/03	07/23/03	09/17/03	12/18/03
Parameter	**Units**					
Volatiles						
Acetone	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
Benzene	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	NA	5.0 UR	10 UR	5.0 UR	5.0 UR
Chlorotrifluoroethene (Freon-1113)	UG/L	10 U	0 U	0 U	5.4 NJ	0 U
1,1-Dichloroethene	UG/L	NA	0.8 J	1.5 J	2.0 U	2.0 U
cis-1,2-Dichloroethene	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
Ethylbenzene	UG/L	NA	4.0 U	8 U	4.0 U	4.0 U
2-Hexanone	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
4-Methyl-2-Pentanone	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
Tetrachloroethene	UG/L	NA	0.6 J	2 U	0.5 J	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	100	230	74	5.0 U
Vinyl Chloride	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
Xylene (total)	UG/L	NA	5.0 U	10 U	5.0 U	5.0 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	20	41	26	0.7 J
Dissolved Gases						
Methane	UG/L	5.0 U	140	98	89	5.9
Total Metals						
Iron	UG/L	NA	2,390	866	517 J	173
Dissolved Metals						
Iron	UG/L	NA	2,290	778	583 J	85.3 B
Miscellaneous Parameters						
Chloride	MG/L	NA	559	474	477 J	218
Nitrogen, Ammonia (As N)	MG/L	NA	0.1 U	0.1 U	0.1 U	0.1 U

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-03	GZ-06	GZ-06	GZ-06	GZ-06
Sample ID		20070801GZ-03V11N	GZ06_52103	GZ06	GZ06-091703	GZ-06-121803
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		08/01/07	05/21/03	07/23/03	09/17/03	12/18/03
Parameter	**Units**					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	0.5 U	0.7	1.3	0.57
Nitrogen, Nitrate	MG/L	NA	0.1 U	NA	0.58	0.1 U
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	0.12 J	NA	NA
Sulfate	MG/L	15.8	25.2	27.5	32.4	5.0 U
Ferrous Iron (field)	MG/L	NA	2.8	9.6	0.25	0.03
Ferric Iron (lab)	MG/L	NA	0.1 U	0.1 U	0.52	0.143
Fluoride	MG/L	NA	0.1 U	0.1 U	0.1 U	0.32
Oil & Grease	MG/L	NA	NA	NA	5.21 UR	NA
Field Parameter						
Dissolved Oxygen	MG/L	0.52	0.76	0.5	0.48	6.86
Oxidation Reduction Potential	mV	98.5	-110	-75	-129	73
pH	S.U.	6.05	NA	NA	NA	NA
Specific Conductance	MS/CM	0.599	2.27	1.99	1.98	1.11
Temperature	DEG C	21.6	NA	NA	NA	NA
Turbidity	NTU	28	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-06	GZ-06	GZ-06	GZ-06	GZ-06
Sample ID		GZ06	GZ-06	MW-GZ-06V08N	GZ-0608N	20061117GZ-0608
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/22/04	05/31/05	12/20/05	08/15/06	11/17/06
Parameter	Units					
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	24	15	10 U	13	2.0 J
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	100 J	9.0 J	10 U	74	2.0 J
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	36	4.0 J	2.0 J	23	2.0 J
Dissolved Gases						
Methane	UG/L	48	310	74	140	180
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	1,610	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-06	GZ-06	GZ-06	GZ-06	GZ-06
Sample ID		GZ06	GZ-06	MW-GZ-06V08N	GZ-0608N	20061117GZ-0608
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/22/04	05/31/05	12/20/05	08/15/06	11/17/06
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	20.8	14.2	31.7	23.2	25.1
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	1.00 U	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	1.15	0.11	0.03	5.67	NA
Oxidation Reduction Potential	mV	-210	-107	-59	-49	NA
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	5.25	1.43	1.16	1.28	NA
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-06	GZ-06	GZ-06	GZ-06	GZ-06
Sample ID		20061117GZ0608FD	20070207GZ-06V08N	20070731GZ-06V08	20080228GZ06V08	20080812GZ06V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/17/06	02/07/07	07/31/07	02/28/08	08/12/08
Parameter	Units	Field Duplicate (1-1)				
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	2.0 J	1.0 J	2.0 J	10 U	10 U
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	2.0 J	14	13	10 UJ	10 U
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	2.0 J	4.0 J	10	10 U	10 U
Dissolved Gases						
Methane	UG/L	210	360	23	5,900	880
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-06	GZ-06	GZ-06	GZ-06	GZ-06
Sample ID		20061117GZ0608FD	20070207GZ-06V08N	20070731GZ-06V08	20080228GZ06V08	20080812GZ06V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/17/06	02/07/07	07/31/07	02/28/08	08/12/08
Parameter	**Units**	Field Duplicate (1-1)				
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	25.4	29.3	50.4	5 U	28.1
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	NA	4.17	1.18	4.1	0.91
Oxidation Reduction Potential	mV	NA	-29	15.6	-89.0	-102
pH	S.U.	NA	NA	6.22	6.15	6.31
Specific Conductance	MS/CM	NA	3.06	1.671	0.89	1.59
Temperature	DEG C	NA	NA	NA	8.91	17.5
Turbidity	NTU	NA	NA	NA	1,000	18

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-02	MW-02	MW-02	MW-02	MW-02
Sample ID		MW02-5-20-03	MW02-5-20-03DUP	DUP-7_22_03	MW02-7_22_03	MW02-091803
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/20/03	05/20/03	07/22/03	07/22/03	09/18/03
Parameter	Units		Field Duplicate (1-1)	Field Duplicate (1-1)		
Volatiles						
Acetone	UG/L	140 J	130 J	50 UR	50 UR	5.0 U
Benzene	UG/L	50 U	25 U	50 U	50 U	5.0 U
Methyl ethyl ketone (2-Butanone)	UG/L	50 UR	25 UR	50 UR	50 UR	5.0 UR
Chlorotrifluoroethene (Freon-1113)	UG/L	0 U	0 U	0 U	0 U	0 U
1,1-Dichloroethene	UG/L	4.4 J	5.1 J	8.2 J	7.5 J	2.0 U
cis-1,2-Dichloroethene	UG/L	50 U	25 U	50 U	50 U	5.0 U
Ethylbenzene	UG/L	40 U	20 U	40 U	3.4 J	4.0 U
2-Hexanone	UG/L	50 U	25 U	50 U	50 U	5.0 U
4-Methyl-2-Pentanone	UG/L	50 U	25 U	50 U	50 U	5.0 U
Tetrachloroethene	UG/L	10 U	5.0 U	10 U	10 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	710	880	1,000	1,000	54
Vinyl Chloride	UG/L	50 U	25 U	50 U	50 U	5.0 U
Xylene (total)	UG/L	50 U	25 U	7.1 J	11 J	5.0 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	34 J	40	40 J	41 J	7.8
Dissolved Gases						
Methane	UG/L	26	32	54	52	410
Total Metals						
Iron	UG/L	27,800	28,300	30,100	30,900	63,800 J
Dissolved Metals						
Iron	UG/L	27,900	28,200	30,500	30,500	60,900 J
Miscellaneous Parameters						
Chloride	MG/L	338	338	307	283	839
Nitrogen, Ammonia (As N)	MG/L	3.3	3.4	4.1	3.8	11.5

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:10 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-02	MW-02	MW-02	MW-02	MW-02
Sample ID		MW02-5-20-03	MW02-5-20-03DUP	DUP-7_22_03	MW02-7_22_03	MW02-091803
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/20/03	05/20/03	07/22/03	07/22/03	09/18/03
Parameter	Units		Field Duplicate (1-1)	Field Duplicate (1-1)		
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	6.6	6.2	6.6	6.1	17.1
Nitrogen, Nitrate	MG/L	0.15	0.16	0.1 U	0.1	0.1 U
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	44.0	46.0	32.3	32.5	4.80
Ferrous Iron (field)	MG/L	25.3	NA	25.7	28.0	49.3
Ferric Iron (lab)	MG/L	2.5	3	4.4	2.9	48.3
Fluoride	MG/L	0.28	0.3	0.37	0.39	0.3
Oil & Grease	MG/L	NA	NA	NA	NA	5 U
Field Parameter						
Dissolved Oxygen	MG/L	0.36	NA	NA	0.26	0.53
Oxidation Reduction Potential	mV	-108	NA	NA	-190	-99
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	1.68	NA	NA	1.65	3.17
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-02	MW-02	MW-02	MW-02	MW-02
Sample ID		MW-02-121803	MW-02	MW-02	MW-02V06N	MW-02V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/18/03	07/22/04	05/31/05	12/20/05	08/14/06
Parameter	**Units**					
Volatiles						
Acetone	UG/L	5.0 U	NA	NA	NA	NA
Benzene	UG/L	5.0 U	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	5.0 UR	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	0 U	14	120	18	200
1,1-Dichloroethene	UG/L	2.0 U	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	5.0 U	NA	NA	NA	NA
Ethylbenzene	UG/L	4.0 U	NA	NA	NA	NA
2-Hexanone	UG/L	5.0 U	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	5.0 U	NA	NA	NA	NA
Tetrachloroethene	UG/L	1.0 U	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	12	21 J	1,200	110	890
Vinyl Chloride	UG/L	5.0 U	NA	NA	NA	NA
Xylene (total)	UG/L	5.0 U	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	3.3 J	4 J	86 J	15	110
Dissolved Gases						
Methane	UG/L	320	140	2,000	5,800	5,500
Total Metals						
Iron	UG/L	69,000	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	69,300	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	769	238	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	11.9	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-02	MW-02	MW-02	MW-02	MW-02
Sample ID		MW-02-121803	MW-02	MW-02	MW-02V06N	MW-02V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/18/03	07/22/04	05/31/05	12/20/05	08/14/06
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	16.9	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	0.1 U	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	15.2	25.2	5.0 U	27.1
Ferrous Iron (field)	MG/L	6.3	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	62.7	NA	NA	NA	NA
Fluoride	MG/L	0.31	0.294	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	0 U	0.91	0 U	0 U	4.92
Oxidation Reduction Potential	mV	-108	-133	-140	-137	-144
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	3.28	2.34	1.19	2.51	1.55
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-02	MW-02	MW-02	MW-02	MW-02
Sample ID		20061117MW02VISN	20070207MW-02V06N	20070731MW-02V15N	20080228MW02V15N	20080812MW02V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/17/06	02/07/07	07/31/07	02/28/08	08/12/08
Parameter	**Units**					
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	21	84	61	120 J	160
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	100	800	290	830 J	700
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10	95	40	72	38 J
Dissolved Gases						
Methane	UG/L	4,300	6,300	2,900	6,400	6,200
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-02	MW-02	MW-02	MW-02	MW-02
Sample ID		20061117MW02VISN	20070207MW-02V06N	20070731MW-02V15N	20080228MW02V15N	20080812MW02V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		11/17/06	02/07/07	07/31/07	02/28/08	08/12/08
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	15.9	27.6	23.2	47.9
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	NA	1.56	0.31	2.87	0 U
Oxidation Reduction Potential	mV	NA	-120	-97.2	-131.0	-119
pH	S.U.	NA	NA	6.39	6.38	6.40
Specific Conductance	MS/CM	NA	1.77	2.357	2.18	2.14
Temperature	DEG C	NA	NA	NA	10.5	18.9
Turbidity	NTU	NA	NA	NA	28	3

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID		MW03_52103	MW03	DUP-91703	MW03-091703	DUP1_121703
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/03	07/23/03	09/17/03	09/17/03	12/17/03
Parameter	Units			Field Duplicate (1-1)		Field Duplicate (1-1)
Volatiles						
Acetone	UG/L	250 U	78	110	110	130 J
Benzene	UG/L	250 U	2.3	2.2	1.8	10 U
Methyl ethyl ketone (2-Butanone)	UG/L	250 UR	130 J	69 J	65 J	39 J
Chlorotrifluoroethene (Freon-1113)	UG/L	0 U	7.0 NJ	6.2 NJ	0 U	0 U
1,1-Dichloroethene	UG/L	33 J	2.0 U	2.0 U	2.0 U	4.0 U
cis-1,2-Dichloroethene	UG/L	250 U	5.0 U	5.0 U	5.0 U	10 U
Ethylbenzene	UG/L	200 U	0.3 J	4.0 U	4.0 U	8.0 U
2-Hexanone	UG/L	250 U	5.0 U	19	16	10 U
4-Methyl-2-Pentanone	UG/L	250 U	5.0 U	11	11	10 U
Tetrachloroethene	UG/L	50 U	1.0 U	1.0 U	1.0 U	4.9
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	5,800	68	26	16	150
Vinyl Chloride	UG/L	250 U	5.0 U	5.0 U	5.0 U	10 U
Xylene (total)	UG/L	250 U	1.1 J	5.0 U	5.0 U	10 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	78 J	43	180	110	170
Dissolved Gases						
Methane	UG/L	86	56	2,400	2,500	7,200
Total Metals						
Iron	UG/L	1,170	150,000	174,000 J	178,000 J	156,000
Dissolved Metals						
Iron	UG/L	267	152,000	187,000 J	186,000 J	167,000
Miscellaneous Parameters						
Chloride	MG/L	113	143	99.2 J	91.5 J	224
Nitrogen, Ammonia (As N)	MG/L	0.36	2.7	0.86	0.95	1.4

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:11 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID		MW03_52103	MW03	DUP-91703	MW03-091703	DUP1_121703
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/03	07/23/03	09/17/03	09/17/03	12/17/03
Parameter	Units			Field Duplicate (1-1)		Field Duplicate (1-1)
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	1.3	10.8	4.5	4.4	4.0
Nitrogen, Nitrate	MG/L	2	NA	0.1 U	0.1 U	0.1 U
Nitrogen, Nitrate-Nitrite	MG/L	NA	0.1 UJ	NA	NA	NA
Sulfate	MG/L	32.7	26.9	5.0 U	5.0 U	5.0 U
Ferrous Iron (field)	MG/L	0.5	3.7	25.5	27.9	23.5
Ferric Iron (lab)	MG/L	0.67	146	67.0	93.0	132
Fluoride	MG/L	0.28	0.44	0.27	0.2	0.22
Oil & Grease	MG/L	NA	NA	9.26 R	9.26 R	NA
Field Parameter						
Dissolved Oxygen	MG/L	0.58	0 U	NA	0.01	NA
Oxidation Reduction Potential	mV	40	-103	NA	-90	NA
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	0.638	4.35	NA	1.64	NA
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID		MW-03_121703	MW-03	MW-03	MW-03VION	MW-03V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/17/03	07/23/04	05/31/05	12/20/05	08/14/06
Parameter	**Units**					
Volatiles						
Acetone	UG/L	120 J	NA	NA	NA	NA
Benzene	UG/L	10 U	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	38 J	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	0 U	68 J	83	2.0 J	51
1,1-Dichloroethene	UG/L	4 U	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	10 U	NA	NA	NA	NA
Ethylbenzene	UG/L	8 U	NA	NA	NA	NA
2-Hexanone	UG/L	10 U	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	10 U	NA	NA	NA	NA
Tetrachloroethene	UG/L	4.6	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	150	4,900 J	2.0 J	10 U	10 U
Vinyl Chloride	UG/L	10 U	NA	NA	NA	NA
Xylene (total)	UG/L	10 U	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	160	3,900	14	1.0 J	0.8 J
Dissolved Gases						
Methane	UG/L	4,900	2,700	6,300	10,000	7,400
Total Metals						
Iron	UG/L	164,000	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	176,000	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	192	71.7	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	1.2	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:11 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID		MW-03_121703	MW-03	MW-03	MW-03VION	MW-03V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/17/03	07/23/04	05/31/05	12/20/05	08/14/06
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	4.0	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	0.1 U	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ferrous Iron (field)	MG/L	30.0	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	134	NA	NA	NA	NA
Fluoride	MG/L	0.25	0.397	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	0.35	1.05	1.24	0 U	5.36
Oxidation Reduction Potential	mV	-59	-143	-133	-151	-123
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	1.99	2.40	3.19	1.20	0.946
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID		20070207MW-03V10N	20070731MW-03V10N	20080228MW03V10N	20080812MW03V10FD	20080812MW03V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/07/07	07/31/07	02/28/08	08/12/08	08/12/08
Parameter	Units				Field Duplicate (1-1)	
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	39	54	13 J	10	10
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10	2.0 J	0.5 J	10 U	10 U
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	48	7.0 J	4.0 J	1.0 J	1.0 J
Dissolved Gases						
Methane	UG/L	15,000	4,500	18,000	10,000	8,400
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:11 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-03	MW-03	MW-03	MW-03	MW-03
Sample ID		20070207MW-03V10N	20070731MW-03V10N	20080228MW03V10N	20080812MW03V10FD	20080812MW03V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/07/07	07/31/07	02/28/08	08/12/08	08/12/08
Parameter	Units				Field Duplicate (1-1)	
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	7.80	38.4	14.1	30.0	28.1
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	2.44	0.22	2.94	NA	0 U
Oxidation Reduction Potential	mV	-116	-79.7	-123.0	NA	-149
pH	S.U.	NA	6.15	6.15	NA	6.36
Specific Conductance	MS/CM	0.91	1.309	1.36	NA	1.69
Temperature	DEG C	NA	NA	11.6	NA	17.8
Turbidity	NTU	NA	NA	41	NA	2

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID		MW04-5-20-03	MW-04_121703	Dup1	MW-04	MW-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/20/03	12/17/03	07/22/04	07/22/04	05/31/05
Parameter	Units			Field Duplicate (1-1)		
Volatiles						
Acetone	UG/L	5.0 U	5.0 U	NA	NA	NA
Benzene	UG/L	5.0 U	5.0 U	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	5.0 UR	5.0 UR	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	0 U	0 U	10 U	10 U	1.0 J
1,1-Dichloroethene	UG/L	2.0 U	2.0 U	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	5.0 U	5.0 U	NA	NA	NA
Ethylbenzene	UG/L	4.0 U	4.0 U	NA	NA	NA
2-Hexanone	UG/L	5.0 U	5.0 U	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	5.0 U	5.0 U	NA	NA	NA
Tetrachloroethene	UG/L	1.0 U	1.0 U	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	5.0 U	5.0 U	10 UJ	0.7 J	10 U
Vinyl Chloride	UG/L	5.0 U	5.0 U	NA	NA	NA
Xylene (total)	UG/L	5.0 U	5.0 U	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	5.0 U	5.0 U	10 U	10 U	10 U
Dissolved Gases						
Methane	UG/L	380	35	69	99	190
Total Metals						
Iron	UG/L	18,400	3,640	NA	NA	NA
Dissolved Metals						
Iron	UG/L	18,500	3,760	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	238	294	158	161	NA
Nitrogen, Ammonia (As N)	MG/L	1.6	1.2	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID		MW04-5-20-03	MW-04_121703	Dup1	MW-04	MW-04
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/20/03	12/17/03	07/22/04	07/22/04	05/31/05
Parameter	Units			Field Duplicate (1-1)		
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	6.2	1.9	NA	NA	NA
Nitrogen, Nitrate	MG/L	0.1 U	0.1 U	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	9.40	10.8	10.8	14.2
Ferrous Iron (field)	MG/L	17.6	2.2	NA	NA	NA
Ferric Iron (lab)	MG/L	0.76	1.3	NA	NA	NA
Fluoride	MG/L	0.27	0.19	0.304	0.302	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	0.54	0 U	NA	0.82	0 U
Oxidation Reduction Potential	mV	-115	0 U	NA	-136	-126
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	1.61	0.99	NA	1.05	1.85
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID		MW-04VION	MW-04V15N	20070207MW-04V10N	20070801MW-04V10N	20080228MW04V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/20/05	08/14/06	02/07/07	08/01/07	02/28/08
Parameter	**Units**					
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	10 U	0.7 J	0.6 J	10 U	1.0 J
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	10 U	10 U	10 U	10 UJ
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	10 U	10 U	10 U	10 U
Dissolved Gases						
Methane	UG/L	400	420	400	43	5,700
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-04	MW-04	MW-04	MW-04	MW-04
Sample ID		MW-04VION	MW-04V15N	20070207MW-04V10N	20070801MW-04V10N	20080228MW04V10N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/20/05	08/14/06	02/07/07	08/01/07	02/28/08
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	6.66	5.0 U	5.0 U	7.0	5 U
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	0 U	4.97	4.73	0.41	2.91
Oxidation Reduction Potential	mV	-161	-154	-81	-79.2	-136.0
pH	S.U.	NA	NA	NA	6.59	6.45
Specific Conductance	MS/CM	1.47	1.14	0.804	1.241	1.16
Temperature	DEG C	NA	NA	NA	NA	9.19
Turbidity	NTU	NA	NA	NA	NA	9

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-04	MW-05	MW-05	MW-05	MW-06
Sample ID		20080812MW04V08N	MW05_52103	MW-05-121803	MW-05	MW06-6-10-03
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		08/12/08	05/21/03	12/18/03	07/23/04	06/10/03
Parameter	**Units**					
Volatiles						
Acetone	UG/L	NA	5.0 U	5.0 U	NA	10 U
Benzene	UG/L	NA	5.0 U	5.0 U	NA	10 U
Methyl ethyl ketone (2-Butanone)	UG/L	NA	5.0 UR	5.0 UR	NA	10 UR
Chlorotrifluoroethene (Freon-1113)	UG/L	10 U	0 U	0 U	10 U	0 U
1,1-Dichloroethene	UG/L	NA	2.0 U	2.0 U	NA	4 U
cis-1,2-Dichloroethene	UG/L	NA	5.0 U	5.0 U	NA	10 U
Ethylbenzene	UG/L	NA	4.0 U	4.0 U	NA	8 U
2-Hexanone	UG/L	NA	5.0 U	5.0 U	NA	10 U
4-Methyl-2-Pentanone	UG/L	NA	5.0 U	5.0 U	NA	10 U
Tetrachloroethene	UG/L	NA	0.4 J	1.0 U	NA	2 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	5.0 U	5.0 U	0.5 J	220
Vinyl Chloride	UG/L	NA	5.0 U	5.0 U	NA	10 U
Xylene (total)	UG/L	NA	5.0 U	5.0 U	NA	10 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	5.0 U	5.0 U	10 U	8.8 J
Dissolved Gases						
Methane	UG/L	290	27	6.7	47	49
Total Metals						
Iron	UG/L	NA	2,110	15,500	NA	14,400
Dissolved Metals						
Iron	UG/L	NA	1,670	39.7 U	NA	14,300
Miscellaneous Parameters						
Chloride	MG/L	NA	49.8	27.5	63.9	184
Nitrogen, Ammonia (As N)	MG/L	NA	0.25	0.1 U	NA	0.19

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-04	MW-05	MW-05	MW-05	MW-06
Sample ID		20080812MW04V08N	MW05_52103	MW-05-121803	MW-05	MW06-6-10-03
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		08/12/08	05/21/03	12/18/03	07/23/04	06/10/03
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	3.6	0.61	NA	0.72
Nitrogen, Nitrate	MG/L	NA	0.22	0.18	NA	0.33
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5 U	50.1	61.4	42.3	32.0
Ferrous Iron (field)	MG/L	NA	1.7	0.07	NA	14.3
Ferric Iron (lab)	MG/L	NA	0.43	15.4	NA	0.12
Fluoride	MG/L	NA	0 U	0.12	0.103	0.46
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	0 U	0.37	0 U	0.97	0.93
Oxidation Reduction Potential	mV	-126	26	121	46	-145
pH	S.U.	6.65	NA	NA	NA	NA
Specific Conductance	MS/CM	0.531	0.426	0.629	0.463	0.741
Temperature	DEG C	21.3	NA	NA	NA	NA
Turbidity	NTU	2	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-06	MW-06	MW-06
Sample ID		MW06-7_22_03	MW06-091803	MW-06_121703	MW-06	Field-Dup
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/22/03	09/18/03	12/17/03	07/23/04	05/31/05
Parameter	Units					Field Duplicate (1-1)
Volatiles						
Acetone	UG/L	5.0 U	5.0 U	10 U	NA	NA
Benzene	UG/L	5.0 U	5.0 U	10 U	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	5.0 UR	5.0 UR	10 UR	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	5.7 NJ	0 U	0 U	5 J	6.0 J
1,1-Dichloroethene	UG/L	1.2 J	2.0 U	4 U	NA	NA
cis-1,2-Dichloroethene	UG/L	1.7 J	1.4 J	1.3 J	NA	NA
Ethylbenzene	UG/L	4.0 U	4.0 U	8 U	NA	NA
2-Hexanone	UG/L	5.0 U	5.0 U	10 U	NA	NA
4-Methyl-2-Pentanone	UG/L	5.0 U	5.0 U	10 U	NA	NA
Tetrachloroethene	UG/L	1.0 U	1.0 U	2 U	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	180	97	250	140 J	1.0 J
Vinyl Chloride	UG/L	1.2 J	5.0 U	10 U	NA	NA
Xylene (total)	UG/L	5.0 U	5.0 U	10 U	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	9.5	8.6	14	23	16
Dissolved Gases						
Methane	UG/L	81	99	78	40	3,600
Total Metals						
Iron	UG/L	10,500	8,370 J	7,690	NA	NA
Dissolved Metals						
Iron	UG/L	10,300	8,470 J	7,670	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	82.3	74.6	84.0	60.5	NA
Nitrogen, Ammonia (As N)	MG/L	0.33	0.31	0.36	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-06	MW-06	MW-06
Sample ID		MW06-7_22_03	MW06-091803	MW-06_121703	MW-06	Field-Dup
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		07/22/03	09/18/03	12/17/03	07/23/04	05/31/05
Parameter	Units					Field Duplicate (1-1)
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	1.1	0.88	0.79	NA	NA
Nitrogen, Nitrate	MG/L	0.1 U	0.1 U	0.1 UJ	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	30.5	39.2	39.1	33.5	5.0 U
Ferrous Iron (field)	MG/L	8.6	6.0	8.7	NA	NA
Ferric Iron (lab)	MG/L	1.9	8.4	1.0 U	NA	NA
Fluoride	MG/L	0.56	0.37	0.42	0.467	NA
Oil & Grease	MG/L	NA	5 U	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	1.07	0 U	0 U	1.04	NA
Oxidation Reduction Potential	mV	-155	-143	-110	-64	NA
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	0.866	0.581	0.602	0.513	NA
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:12 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-06	MW-06	MW-06
Sample ID		MW-06	MW-06V15FD	MW-06V15N	MW-06V15FD	MW-06V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/31/05	12/20/05	12/20/05	08/15/06	08/15/06
Parameter	Units		Field Duplicate (1-1)		Field Duplicate (1-1)	
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	5.0 J	6.0 J	6.0 J	10 U	10 U
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	1.0 J	10 U	10 U	10 U	10 U
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	14	10 UJ	10 UJ	10 U	10 U
Dissolved Gases						
Methane	UG/L	3,300	6,700	5,600	1,600	1,700
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-06	MW-06	MW-06
Sample ID		MW-06	MW-06V15FD	MW-06V15N	MW-06V15FD	MW-06V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/31/05	12/20/05	12/20/05	08/15/06	08/15/06
Parameter	Units		Field Duplicate (1-1)		Field Duplicate (1-1)	
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	0 U	NA	0 U	NA	6.83
Oxidation Reduction Potential	mV	-140	NA	-140	NA	87
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	1.13	NA	1.29	NA	0.033
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-06	MW-06	MW-06
Sample ID		20070207MW-06V15FD	20070207MW-06V15N	20070731MW-06V15FD	20070731MW-06V15N	20080228MW06V15FD
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/07/07	02/07/07	07/31/07	07/31/07	02/28/08
Parameter	Units	Field Duplicate (1-1)		Field Duplicate (1-1)		Field Duplicate (1-1)
Volatiles						
Acetone	UG/L	NA	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	100	100	18	21	8.0 J
1,1-Dichloroethene	UG/L	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	3.0 J	3.0 J	10 U	10 U	10 UJ
Vinyl Chloride	UG/L	NA	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	8.0 J	8.0 J	0.5 J	0.6 J	10 U
Dissolved Gases						
Methane	UG/L	12,000	13,000	3,800	2,500	12,000
Total Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	NA	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-06	MW-06	MW-06
Sample ID		20070207MW-06V15FD	20070207MW-06V15N	20070731MW-06V15FD	20070731MW-06V15N	20080228MW06V15FD
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/07/07	02/07/07	07/31/07	07/31/07	02/28/08
Parameter	Units	Field Duplicate (1-1)		Field Duplicate (1-1)		Field Duplicate (1-1)
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	7.40	7.00	41.8	44.2	5 U
Ferrous Iron (field)	MG/L	NA	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	NA	1.05	NA	0.31	NA
Oxidation Reduction Potential	mV	NA	-136	NA	-99.7	NA
pH	S.U.	NA	NA	NA	6.38	NA
Specific Conductance	MS/CM	NA	0.79	NA	1.050	NA
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-07	MW-07	MW-07
Sample ID		20080228MW06V15N	20080812MW06V13N	MW07-6-10-03	MW07	MW07-91703
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/28/08	08/12/08	06/10/03	07/23/03	09/17/03
Parameter	**Units**					
Volatiles						
Acetone	UG/L	NA	NA	250 U	500 U	250 U
Benzene	UG/L	NA	NA	250 U	500 U	250 U
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	250 UR	500 UR	250 UR
Chlorotrifluoroethene (Freon-1113)	UG/L	8.0 J	4.0 J	0 U	0 U	0 U
1,1-Dichloroethene	UG/L	NA	NA	100 U	68 J	100 U
cis-1,2-Dichloroethene	UG/L	NA	NA	250 U	500 U	250 U
Ethylbenzene	UG/L	NA	NA	200 U	400 U	200 U
2-Hexanone	UG/L	NA	NA	250 U	500 U	250 U
4-Methyl-2-Pentanone	UG/L	NA	NA	250 U	500 U	250 U
Tetrachloroethene	UG/L	NA	NA	50 U	100 U	50 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	10 U	5,400	8,500	6,100
Vinyl Chloride	UG/L	NA	NA	250 U	500 U	250 U
Xylene (total)	UG/L	NA	NA	250 U	500 U	250 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	10 U	68 J	130 J	130 J
Dissolved Gases						
Methane	UG/L	14,000	12,000	740	420	1,200
Total Metals						
Iron	UG/L	NA	NA	21,300	21,200	32,700 J
Dissolved Metals						
Iron	UG/L	NA	NA	20,800	20,800	32,500 J
Miscellaneous Parameters						
Chloride	MG/L	NA	NA	140	168	300 J
Nitrogen, Ammonia (As N)	MG/L	NA	NA	0.39	0.6	0.66

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-06	MW-07	MW-07	MW-07
Sample ID		20080228MW06V15N	20080812MW06V13N	MW07-6-10-03	MW07	MW07-91703
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		02/28/08	08/12/08	06/10/03	07/23/03	09/17/03
Parameter	Units					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	1.2	1.8	2.1
Nitrogen, Nitrate	MG/L	NA	NA	0.1 U	NA	0.1 U
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	0.1 UJ	NA
Sulfate	MG/L	5 U	17.8	32.8	31.0	23.6
Ferrous Iron (field)	MG/L	NA	NA	20.2	19.8	33.8
Ferric Iron (lab)	MG/L	NA	NA	1	1.4	14.1
Fluoride	MG/L	NA	NA	0.33	0.25	0.24
Oil & Grease	MG/L	NA	NA	NA	NA	5.44 U
Field Parameter						
Dissolved Oxygen	MG/L	2.61	0 U	0.9	0.1	0 U
Oxidation Reduction Potential	mV	-122.0	-117	-130	-108	-118
pH	S.U.	6.24	6.37	NA	NA	NA
Specific Conductance	MS/CM	1.21	1.47	0.93	1.11	1.44
Temperature	DEG C	12.2	17.0	NA	NA	NA
Turbidity	NTU	9	5	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-07	MW-07	MW-07	MW-07	MW-07
Sample ID		MW-07_121703	MW-07	MW-07	MW-07V15N	MW-07V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/17/03	07/22/04	05/31/05	12/20/05	08/14/06
Parameter	**Units**					
Volatiles						
Acetone	UG/L	50 U	NA	NA	NA	NA
Benzene	UG/L	14	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	50 UR	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	0 U	210	140	47	97
1,1-Dichloroethene	UG/L	20 U	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	50 U	NA	NA	NA	NA
Ethylbenzene	UG/L	49	NA	NA	NA	NA
2-Hexanone	UG/L	50 U	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	50 U	NA	NA	NA	NA
Tetrachloroethene	UG/L	10 U	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	370	110 J	10 U	10 U	10 U
Vinyl Chloride	UG/L	50 U	NA	NA	NA	NA
Xylene (total)	UG/L	50 U	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	940	50	2.0 J	10 U	1.0 J
Dissolved Gases						
Methane	UG/L	1,700	2,500	5,900	9,700	6,900
Total Metals						
Iron	UG/L	38,900	NA	NA	NA	NA
Dissolved Metals						
Iron	UG/L	38,900	NA	NA	NA	NA
Miscellaneous Parameters						
Chloride	MG/L	328	303	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	0.99	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:13 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-07	MW-07	MW-07	MW-07	MW-07
Sample ID		MW-07_121703	MW-07	MW-07	MW-07V15N	MW-07V15N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		12/17/03	07/22/04	05/31/05	12/20/05	08/14/06
Parameter	**Units**					
Miscellaneous Parameters						
Nitrogen, Kjeldahl, Total	MG/L	2.8	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	0.1 U	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	5.0 U	5.0 U	5.0 U	19.3
Ferrous Iron (field)	MG/L	19.5	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	19.4	NA	NA	NA	NA
Fluoride	MG/L	0.19	0.190	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA	NA
Field Parameter						
Dissolved Oxygen	MG/L	3.33	0.88	0 U	0 U	3.47
Oxidation Reduction Potential	mV	-115	-153	-152	-169	-163
pH	S.U.	NA	NA	NA	NA	NA
Specific Conductance	MS/CM	1.94	1.69	1.75	1.65	1.44
Temperature	DEG C	NA	NA	NA	NA	NA
Turbidity	NTU	NA	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-07	MW-07	MW-07	MW-07
Sample ID		20070207MW-07V15N	20070731MW-07V15N	20080228MW07V15N	20080812MW07V09N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		02/07/07	07/31/07	02/28/08	08/12/08
Parameter	**Units**				
Volatiles					
Acetone	UG/L	NA	NA	NA	NA
Benzene	UG/L	NA	NA	NA	NA
Methyl ethyl ketone (2-Butanone)	UG/L	NA	NA	NA	NA
Chlorotrifluoroethene (Freon-1113)	UG/L	89	82	92	170
1,1-Dichloroethene	UG/L	NA	NA	NA	NA
cis-1,2-Dichloroethene	UG/L	NA	NA	NA	NA
Ethylbenzene	UG/L	NA	NA	NA	NA
2-Hexanone	UG/L	NA	NA	NA	NA
4-Methyl-2-Pentanone	UG/L	NA	NA	NA	NA
Tetrachloroethene	UG/L	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	6.0 J	10 UJ	3.0 J
Vinyl Chloride	UG/L	NA	NA	NA	NA
Xylene (total)	UG/L	NA	NA	NA	NA
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	3.0 J	10	0.9 J	16
Dissolved Gases					
Methane	UG/L	6,200	4,100	7,100	5,600
Total Metals					
Iron	UG/L	NA	NA	NA	NA
Dissolved Metals					
Iron	UG/L	NA	NA	NA	NA
Miscellaneous Parameters					
Chloride	MG/L	NA	NA	NA	NA
Nitrogen, Ammonia (As N)	MG/L	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mdb
Printed: 10/2/2008 1:39:13 PM
([LOGDATE] BETWEEN #05/01/03# AND #08/12/08#) AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] <> 'MW-0

TABLE 3
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-07	MW-07	MW-07	MW-07
Sample ID		20070207MW-07V15N	20070731MW-07V15N	20080228MW07V15N	20080812MW07V09N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-
Date Sampled		02/07/07	07/31/07	02/28/08	08/12/08
Parameter	Units				
Miscellaneous Parameters					
Nitrogen, Kjeldahl, Total	MG/L	NA	NA	NA	NA
Nitrogen, Nitrate	MG/L	NA	NA	NA	NA
Nitrogen, Nitrate-Nitrite	MG/L	NA	NA	NA	NA
Sulfate	MG/L	5.0 U	6.1	5 U	5.6
Ferrous Iron (field)	MG/L	NA	NA	NA	NA
Ferric Iron (lab)	MG/L	NA	NA	NA	NA
Fluoride	MG/L	NA	NA	NA	NA
Oil & Grease	MG/L	NA	NA	NA	NA
Field Parameter					
Dissolved Oxygen	MG/L	2.89	0.48	2.64	0 U
Oxidation Reduction Potential	mV	-121	-113.5	-137.0	-167
pH	S.U.	NA	6.78	6.32	6.48
Specific Conductance	MS/CM	2.02	2.182	1.62	1.99
Temperature	DEG C	NA	NA	9.03	17.3
Turbidity	NTU	NA	NA	54	25

Flags assigned during chemistry validation are shown.

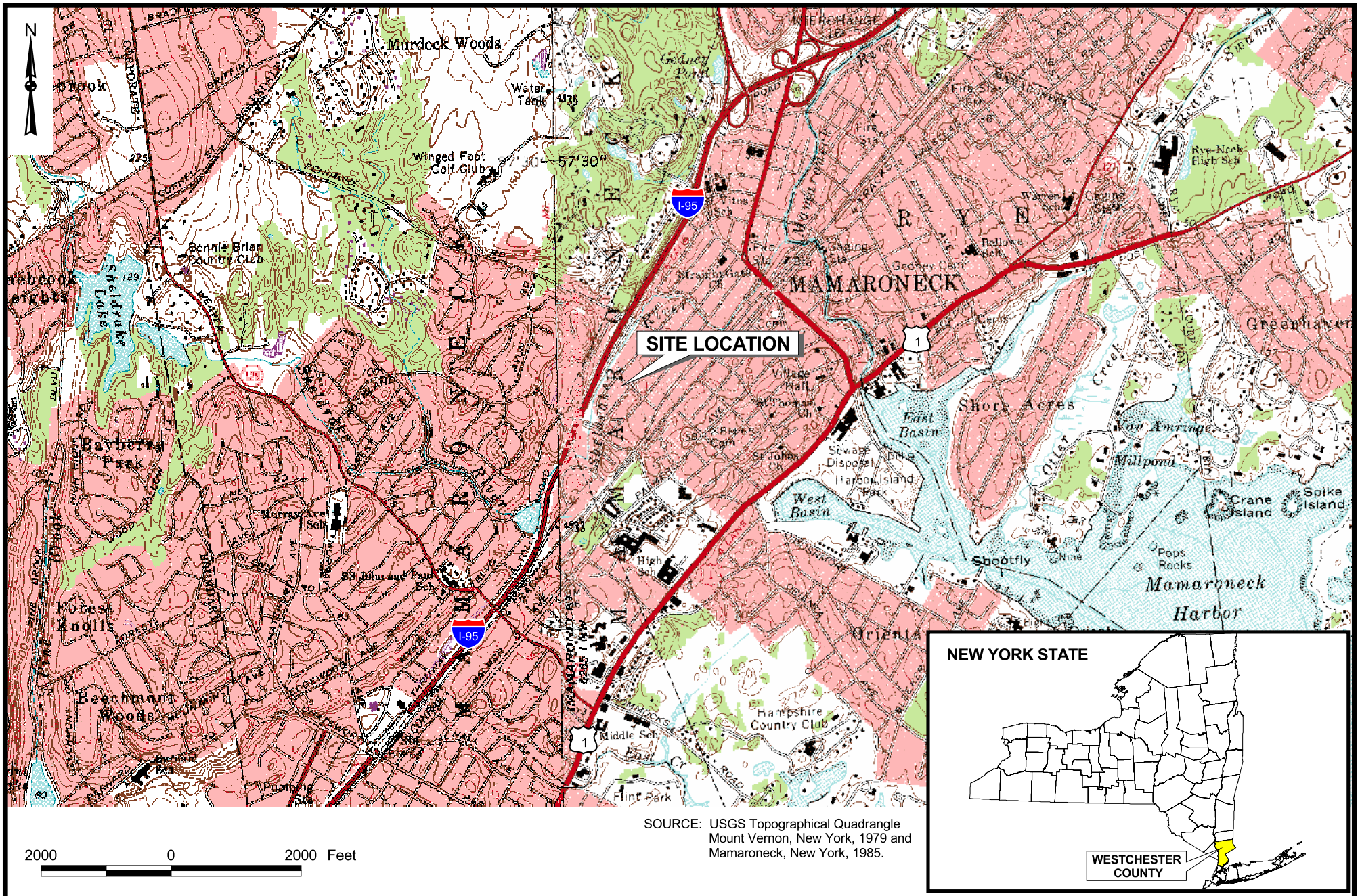
B - Value between Instrument Detection Limit and Contract Required Detection Limit.
J - Analyte is reported below the PQL at an estimated concentration.
UJ - Not detected above the estimated quantitation limit
U - Non-Detect NA - Not Analyzed R - Rejected

Only Detected Results Reported.

Detection Limits shown are PQL

FIGURES

N:\11172730.00000\DB\GIS\2001\report00.apr SITE LOCATION
2/14/2006

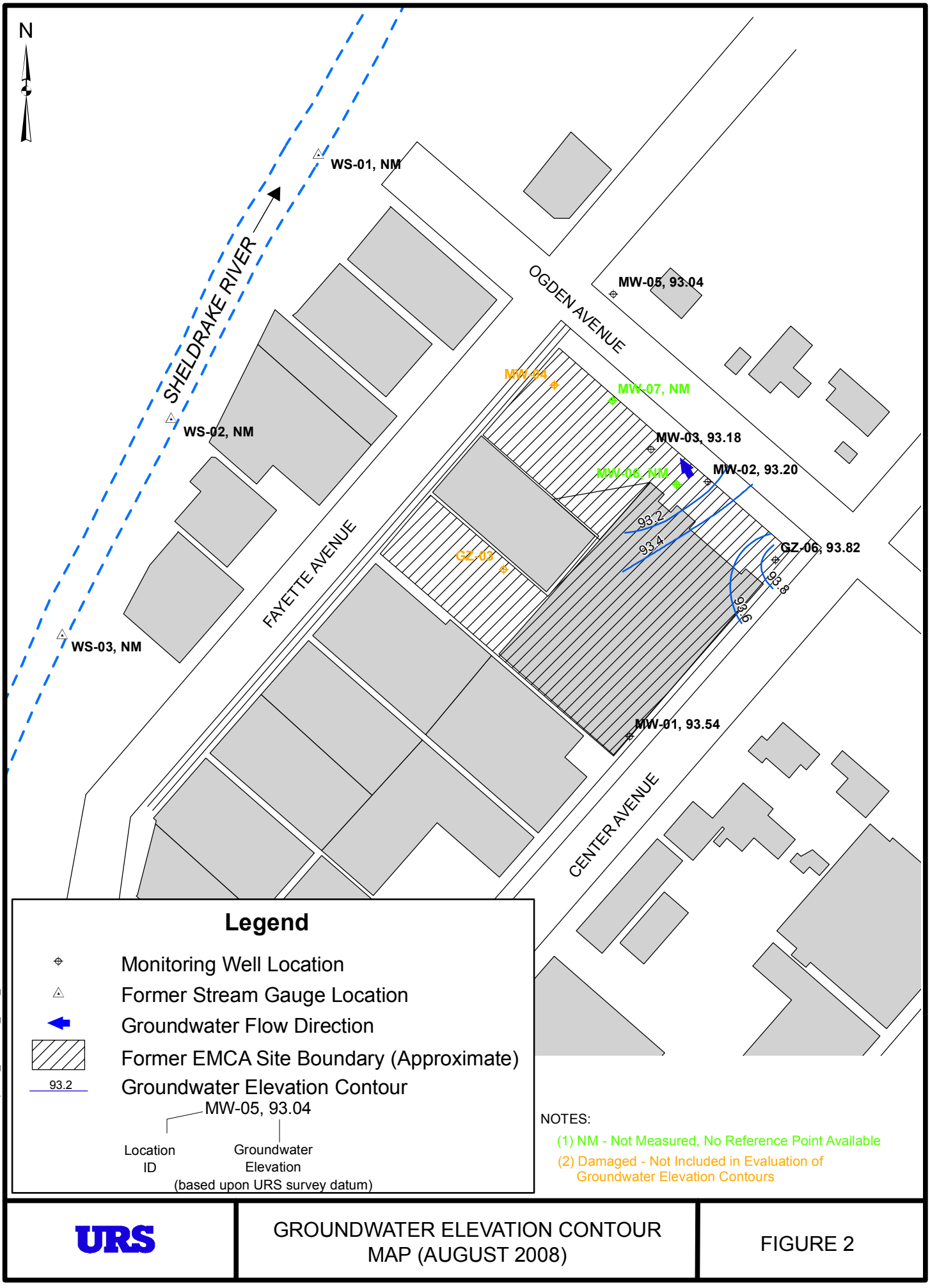


SOURCE: USGS Topographical Quadrangle Mount Vernon, New York, 1979 and Mamaroneck, New York, 1985.

URS

LOCATION MAP

FIGURE 1



URS

GROUNDWATER ELEVATION CONTOUR MAP (AUGUST 2008)

FIGURE 2

N:\11172730.00000\DB\GIS\2001\ArcMap\GW_Elevation_2008_08.mxd 10/3/2008 EM

N

MW-04	10/99	07/00	07/01	05/03	12/03	07/04	05/05	12/05	08/06	02/07	8/07	2/08	8/08
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	11	ND	ND	ND	ND	0.7 J	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorotrifluoroethene (Freon-1113)	ND	ND	ND	ND	ND	ND	1.0 J	ND	0.7 J	0.6 J	ND	1.0 J	ND

MW-05	07/00	07/01	05/03	12/03	07/04
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	7	ND	ND	ND	0.5 J
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND	ND	ND	ND	ND
Chlorotrifluoroethene (Freon-1113)	ND	ND	ND	ND	ND

MW-03	10/99	07/00	07/01	05/03	07/03	09/03	12/03	07/04	05/05	12/05	08/06	02/07	8/07	2/08	8/08
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	17000	11000	13000	5800	68	26	150	4900 J	2 J	ND	ND	10	2.0 J	0.5 J	ND
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND	ND	ND	78 J	43	180	170	3900	14	1.0 J	0.8 J	48	7.0 J	4.0 J	1.0 J
Chlorotrifluoroethene (Freon-1113)	ND	ND	ND	ND	7	6.2	ND	68 J	83	2.0 J	51	39	54	13 J	10

MW-02	10/99	07/00	07/01	05/03	07/03	09/03	12/03	07/04	05/05	12/05	08/06	11/06	02/07	8/07	2/08	8/08
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	740	1700	2400	880	1000	54	12	21 J	1200	110	890	100	800	290	830 J	700
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND	ND	ND	40	41 J	7.8	3.3 J	4 J	86 J	15	110	10	95	40	72	38 J
Chlorotrifluoroethene (Freon-1113)	ND	ND	ND	ND	ND	ND	ND	14	120	18	200	21	84	61	120 J	160

MW-07	06/03	07/03	09/03	12/03	07/04	05/05	12/05	08/06	02/07	08/07	2/08	8/08
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	5400	8500	6100	370	110 J	ND	ND	ND	ND	6.0 J	ND	3.0 J
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	68 J	130 J	130 J	940	50	2.0 J	ND	1.0 J	3.0 J	10	0.9 J	16
Chlorotrifluoroethene (Freon-1113)	ND	ND	ND	ND	210	140	47	97	89	82	92	170

MW-06	06/03	07/03	09/03	12/03	07/04	05/05	12/05	08/06	02/07	08/07	2/08	8/08
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	220	180	97	250	140 J	1.0 J	ND	ND	3 J	ND	ND	ND
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	8.8 J	9.5	8.6	14	23	16	ND	ND	8 J	0.6 J	ND	ND
Chlorotrifluoroethene (Freon-1113)	ND	5.7	ND	ND	5 J	6.0 J	6.0 J	ND	100	21	8.0 J	4.0 J

GZ-03	08/07
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ND
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND
Chlorotrifluoroethene (Freon-1113)	ND

GZ-06	05/88	03/89	10/99	07/00	07/01	05/03	07/03	09/03	12/03	07/04	05/05	12/05	08/06	11/06	02/07	08/07	2/08	8/08
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	1274	200	49	900	250	100	230	74	ND	100 J	9 J	ND	74	2.0 J	14	13	ND	ND
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND	ND	ND	ND	ND	20	41	26	0.7 J	36	4.0 J	2.0 J	23	2.0 J	4.0 J	10	ND	ND
Chlorotrifluoroethene (Freon-1113)	ND	ND	ND	ND	ND	ND	ND	5.4	ND	24	15	ND	13	2.0 J	1.0 J	2.0 J	ND	ND

MW-01	08/07
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	ND
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	ND
Chlorotrifluoroethene (Freon-1113)	ND

SHELDRAKE RIVER

FAYETTE AVENUE

OGDEN AVENUE

CENTER AVENUE

Legend

- Existing Monitoring Well Location
- Concentration Exceeds NYSDEC TOGS (1.1.1) Class GA Standards
- Generalized Groundwater Flow Direction

All Analytical Results are Reported in UG/L

NOTES: ND - Not Detected

- 07/00 - Pre-Pilot Injection Sampling Dates
- 12/03 - Post-Pilot Injection/Pre-IRM Injection Sampling Dates
- 12/05 - Post-IRM Injection Sampling Dates
- 2/08 - Post-Supplemental Injection Sampling Dates

60 30 0 60 Feet

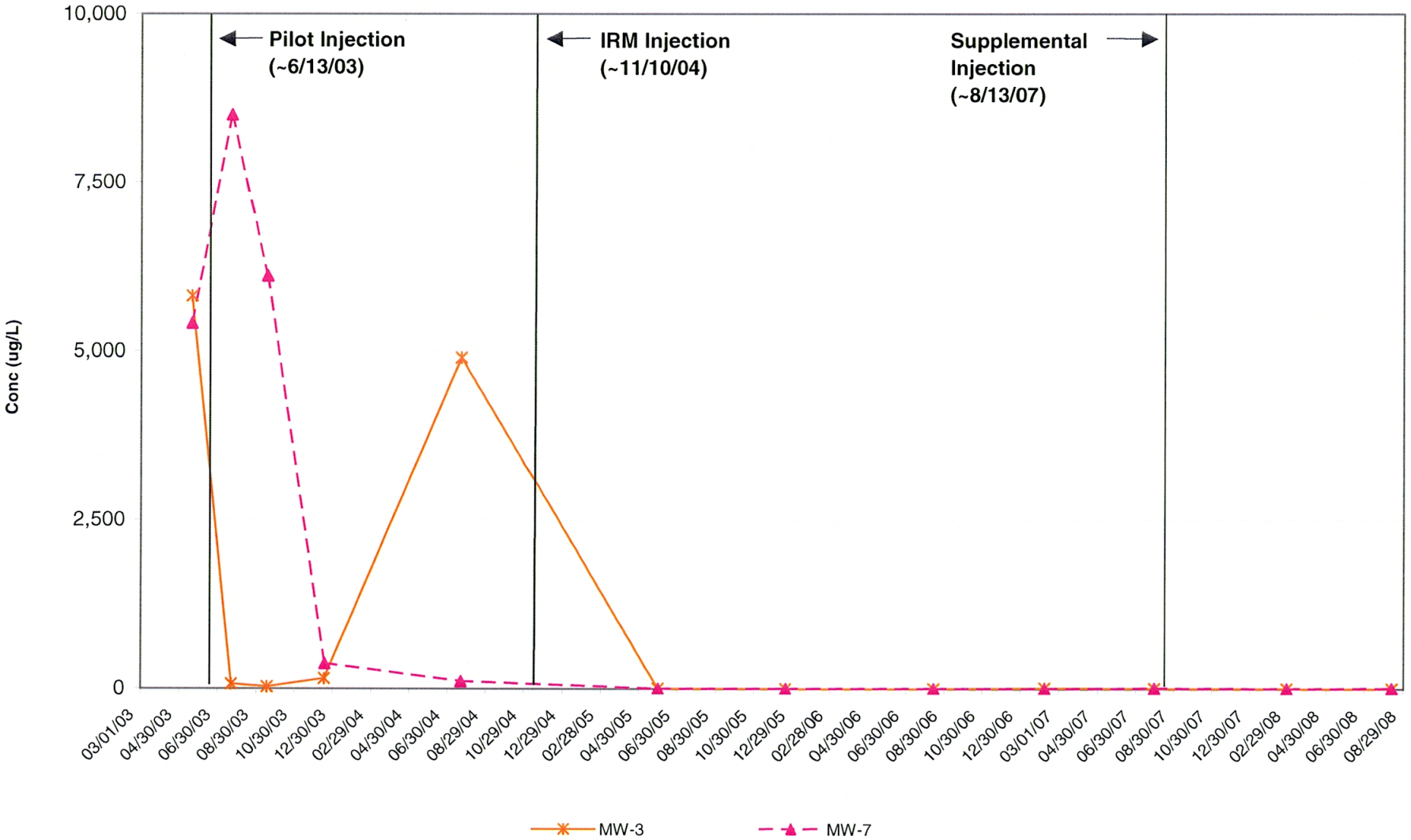
FORMER EMCA SITE
SUMMARY OF FREON DETECTIONS IN GROUNDWATER

URS

FIGURE 3

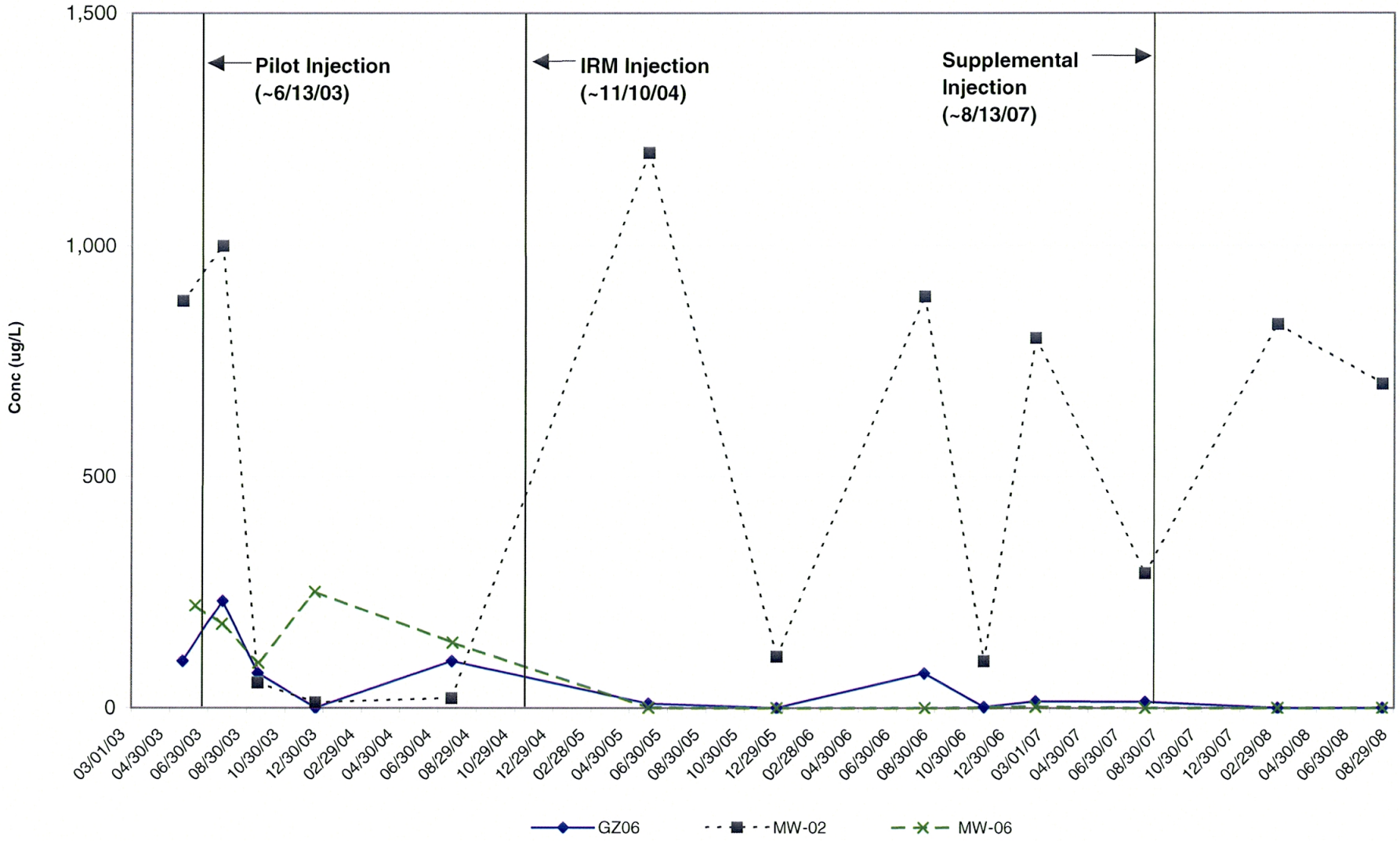
N:\11172730.00000\DB\GIS\2001\ArcMap\Chemical_Update.mxd 9/12/2008 B. Farster

FIGURE 4
FORMER EMCA SITE
Freon 113 Concentrations, MW-03 and MW-07



N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 4

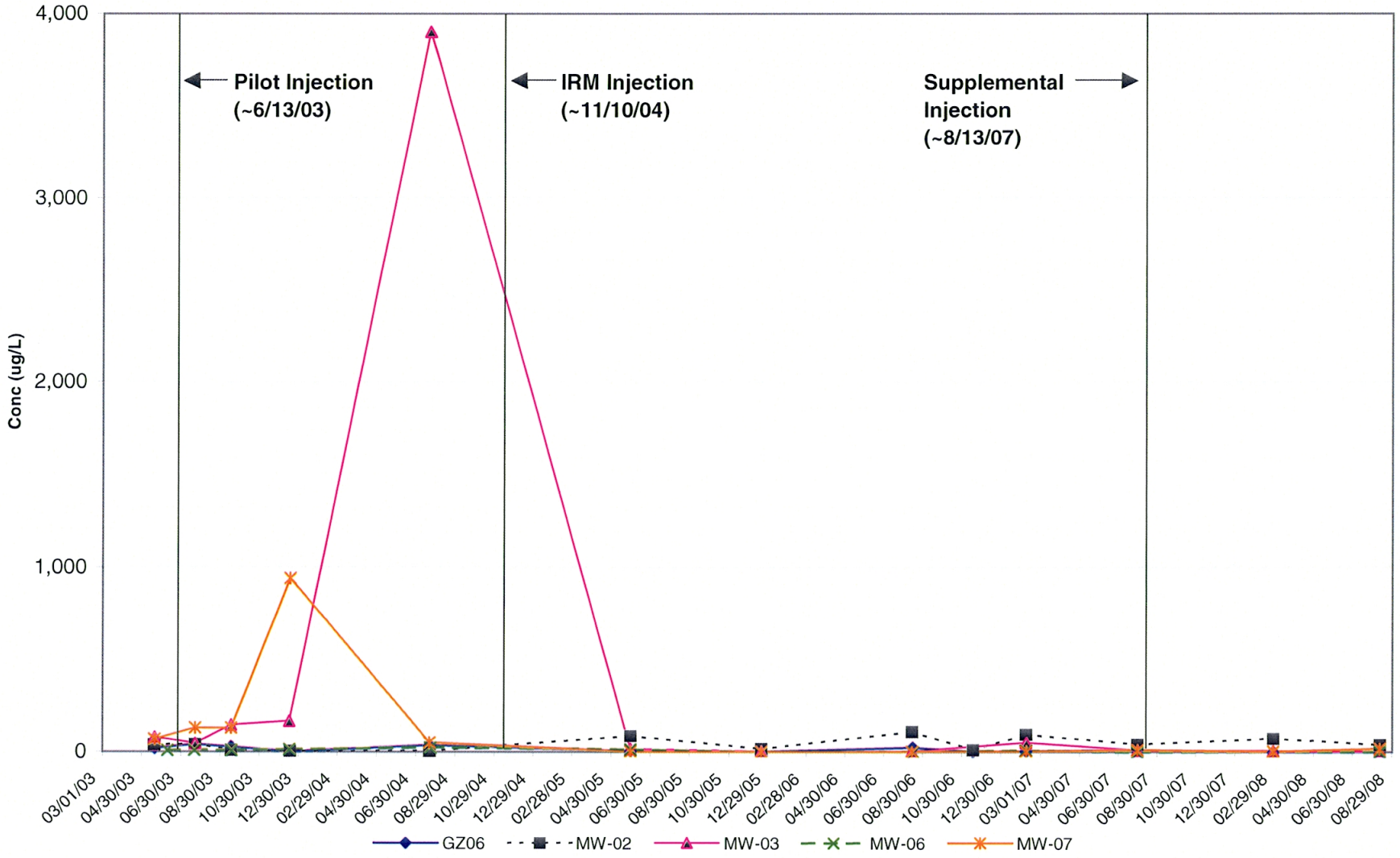
FIGURE 5
FORMER EMCA SITE
Freon 113 Concentrations, GZ-06, MW-02, and MW-06



N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 5

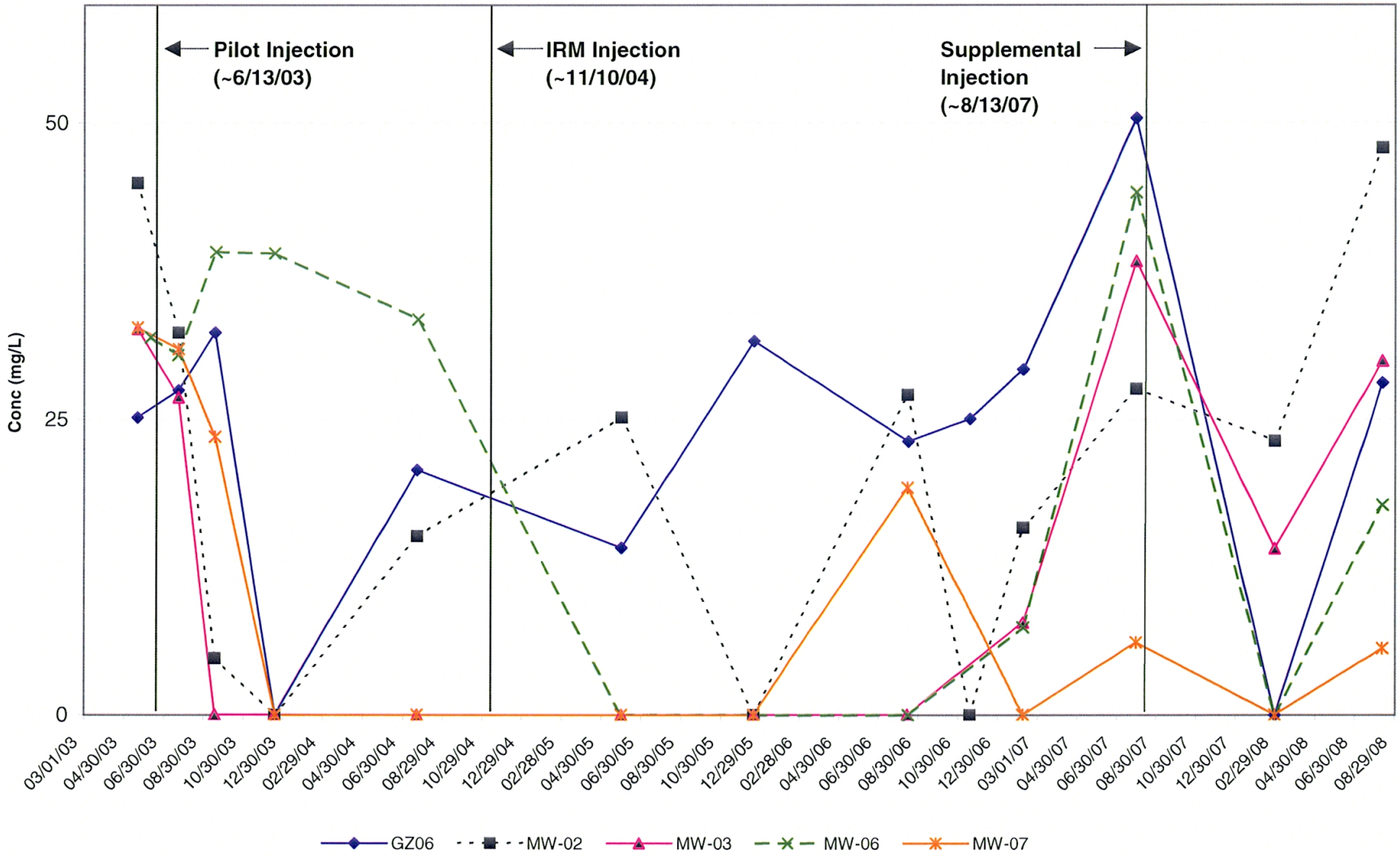
FIGURE 6
FORMER EMCA SITE

Freon 123a Concentrations



N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 6

FIGURE 7
FORMER EMCA SITE
Sulfate Concentrations

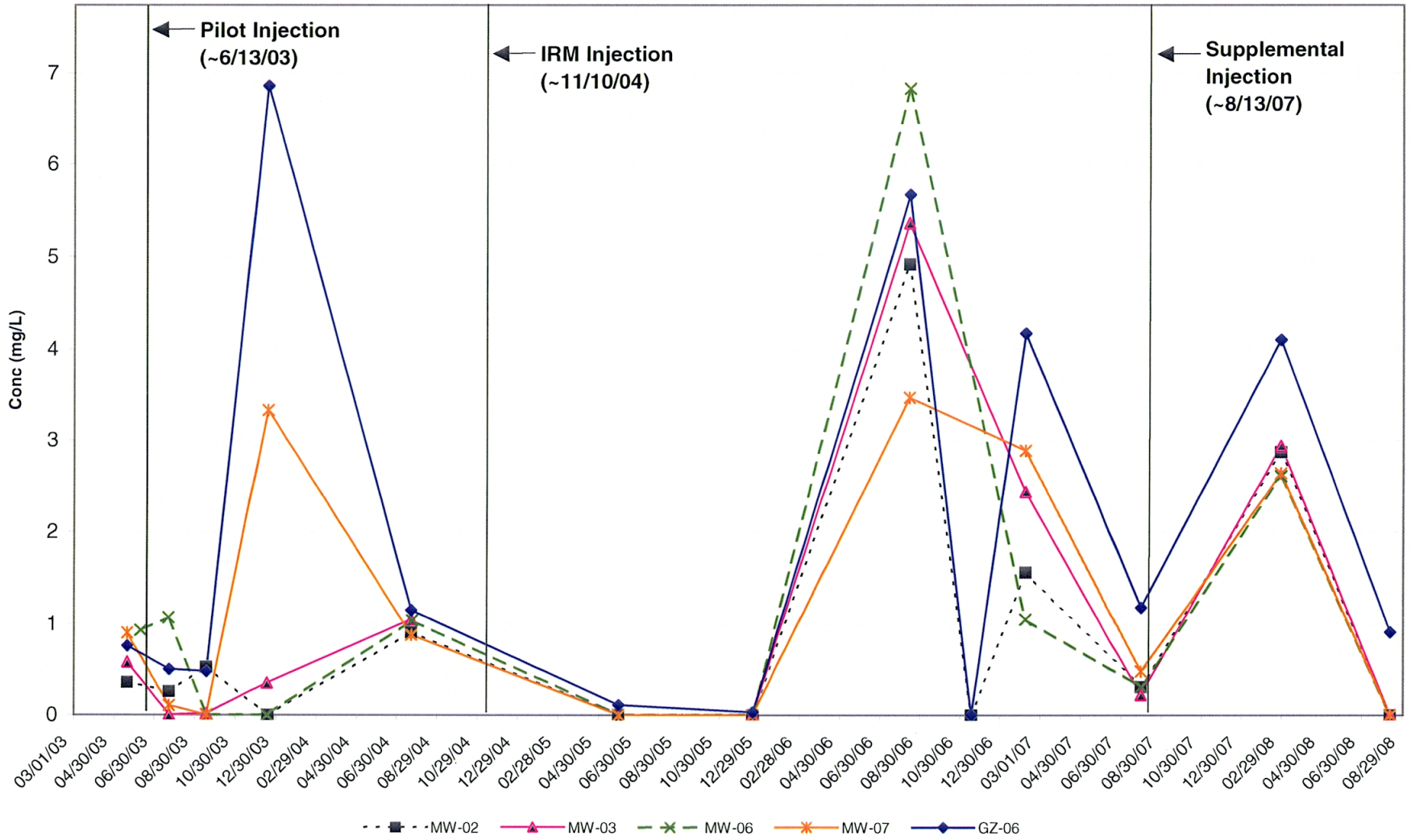


N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 7

FIGURE 8
FORMER EMCA SITE
Methane Concentrations

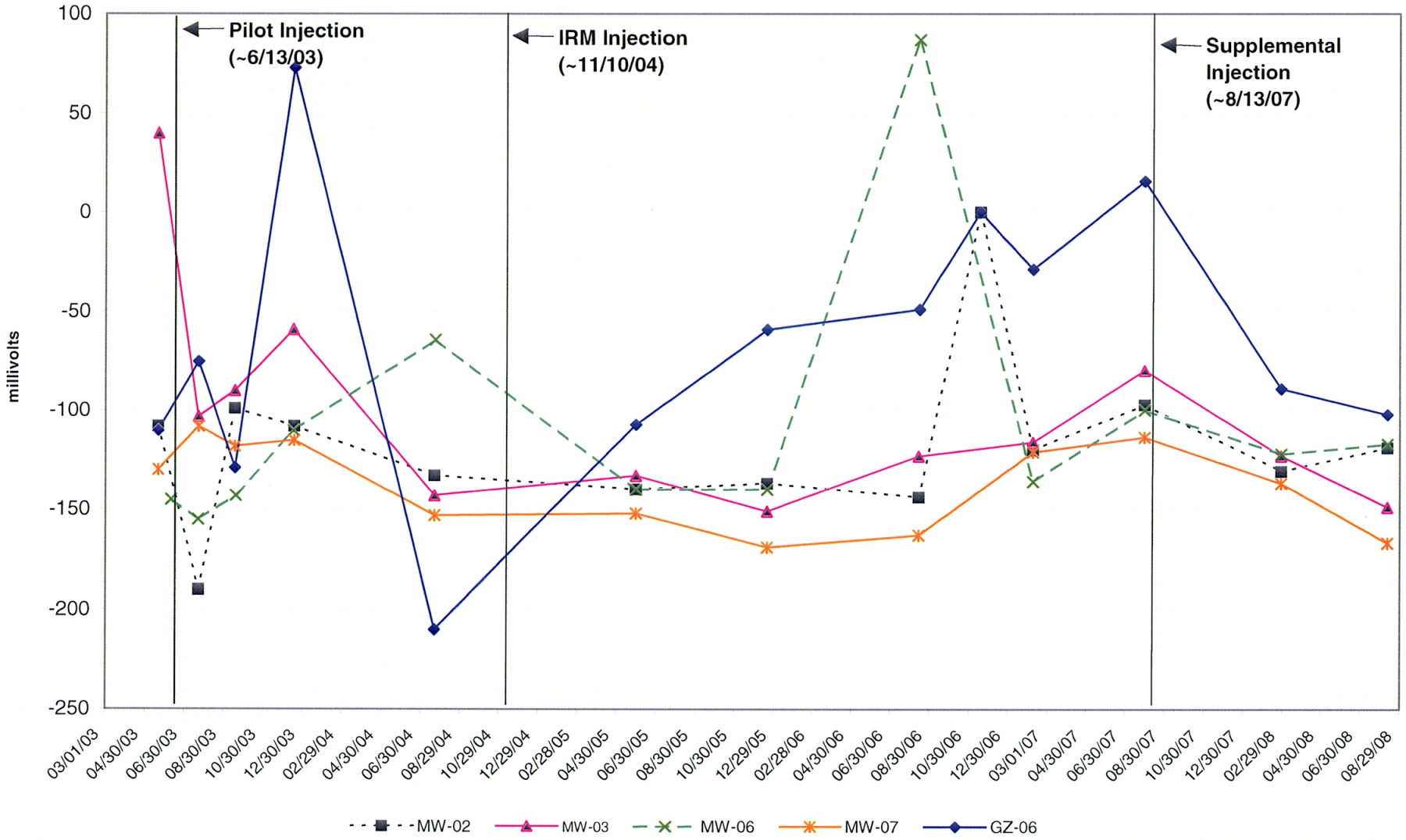
N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 8

FIGURE 9
FORMER EMCA SITE
Dissolved Oxygen Concentrations



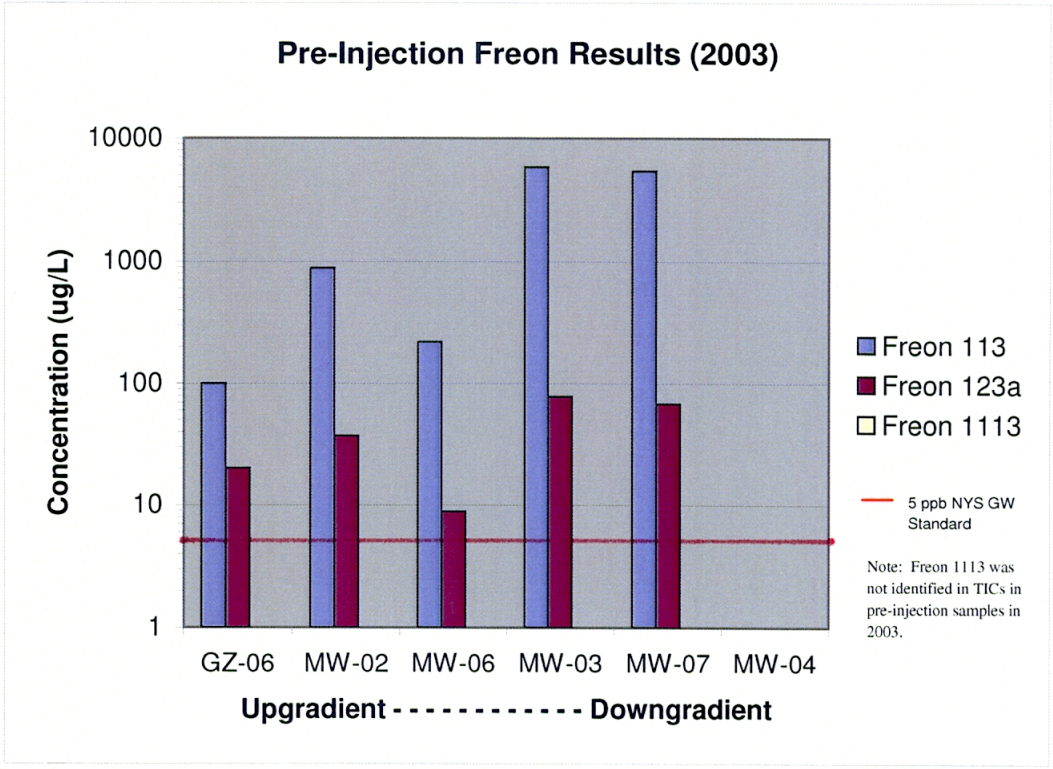
N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 9

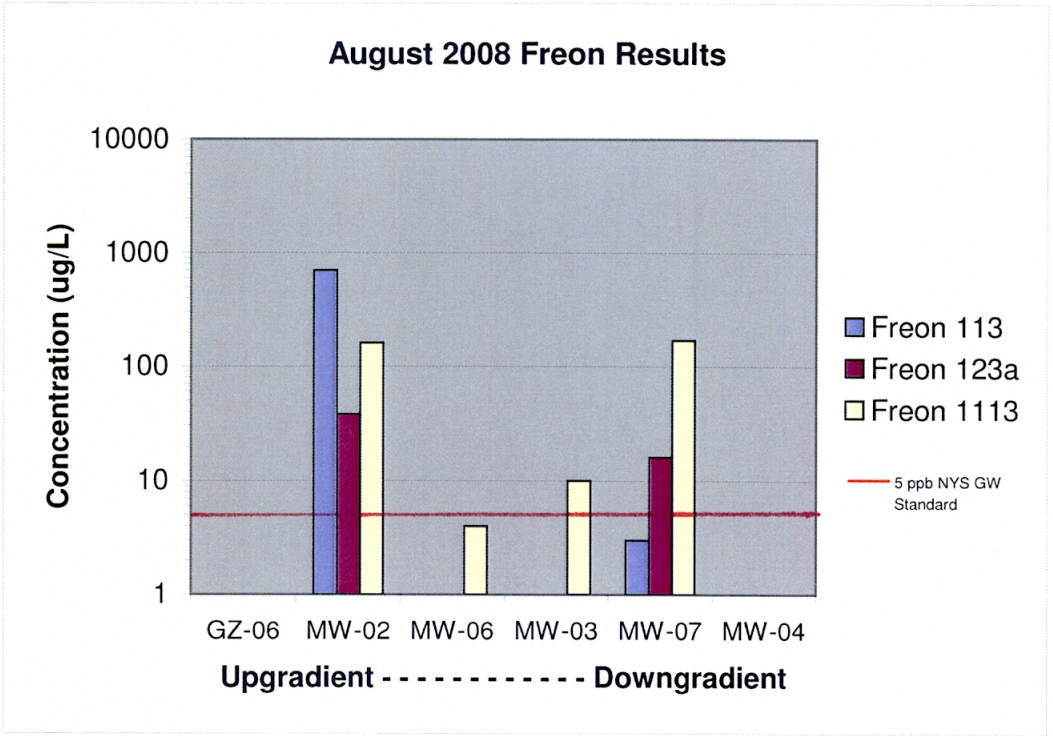
FIGURE 10
FORMER EMCA SITE
Oxidation Reduction Potential



N:\11172730.00000\EXCEL\EMCA Site\Calcs Information\GW Data Plots_Time Scaled Long_August 2008.xls Figure 10

FIGURE 11
FORMER EMCA SITE - FREON CONCENTRATIONS
PRE-INJECTION AND CURRENT RESULTS





N:\11172730.00000\Excel\GW Data Plots_Time Scaled Long_August 2008\Fig 11 Injection Charts (2)

APPENDIX A

LOW FLOW GROUNDWATER PURGING/SAMPLING LOGS

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Rohm and Haas - Former Emca Site Site: Former EMCA Site Well I.D.: MW-02

Date: 8/12/2008 Sampling Personnel: Tim Ifkovich Company: URS Corporation

Purging/Sampling Device: Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: HDPE and Silicone Pump/Tubing Inlet Location: Midpoint of Saturated Screen

Measuring Point: Below Top of Riser Initial Depth to Water: 5.98 Depth to Well Bottom: 11.58 Well Diameter: 1" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 0.86 Estimated Purge Volume (liters): 10.5

Sample ID: 20080812MW-02V10N Sample Time: 1559 QA/QC: MS/MSD

Sample Parameters: Freon 113, 1113, 123A, Methane and Sulfate

Notes: slightly turbid, brownish gray, very slight sheen

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)
1523	6.39	19.56	2.92	0.33	160	-120	300	6.12
1528	6.43	19.18	2.71	0	57	-125	300	6.12
1533	6.42	19.07	2.52	0	23	-124	300	6.11
1538	6.42	19.08	2.35	0	10	-122	300	6.11
1543	6.42	19.0	2.28	0	5	-121	300	6.11
1548	6.41	18.91	2.19	0	5	-120	300	6.11
1553	6.40	18.88	2.17	0	4	-119	300	6.11
1558	6.40	18.88	2.14	0	3	-119	300	6.11
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 ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Rohm and Haas - Former Emca Site Site: Former EMCA Site Well I.D.: MW-03

Date: 8/12/2008 Sampling Personnel: Tim Ifkovich Company: URS Corporation

Purging/Sampling Device: Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: HDPE and Silicone Pump/Tubing Inlet Location: Midpoint of Saturated Screen

Measuring Point: Below Top of Riser Initial Depth to Water: 6.17 Depth to Well Bottom: 14.40 Well Diameter: 1" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 1.27 Estimated Purge Volume (liters): 10.5

Sample ID: 20080812MW-03V10N Sample Time: 1215 QA/QC: Field Duplicate

Sample Parameters: Freon 113, 1113, 123A, Methane and Sulfate

Notes: slightly turbid, grayish brown initially but quickly cleared up, very slight sheen, small black flecks in water

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)
1140	6.12	18.73	1.39	0.21	38	-113	300	7.85
1145	6.10	18.21	1.61	0	12	-125	300	7.90
1150	6.16	18.19	1.66	0	6	-132	300	7.89
1155	6.24	17.89	1.68	0	4	-139	300	7.93
1200	6.29	18.08	1.67	0	4	-143	300	7.95
1205	6.33	18.01	1.68	0	4	-147	300	7.96
1210	6.34	18.03	1.68	0	2	-148	300	7.96
1215	6.36	17.78	1.69	0	2	-149	300	7.96
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 ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Rohm and Haas - Former Emca Site Site: Former EMCA Site Well I.D.: MW-04

Date: 8/12/2008 Sampling Personnel: Tim Ifkovich Company: URS Corporation

Purging/Sampling Device: Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: HDPE and Silicone Pump/Tubing Inlet Location: Midpoint of Saturated Screen

Measuring Point: Below Top of Riser Initial Depth to Water: 5.50 Depth to Well Bottom: 10.91 Well Diameter: 1" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 0.83 Estimated Purge Volume (liters): 9.0

Sample ID: 20080812MW-04V08N Sample Time: 1328 QA/QC: None

Sample Parameters: Freon 113, 1113, 123A, Methane and Sulfate

Notes: slightly cloudy to clear

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)
1257	6.51	21.76	0.509	0.45	29	-96	300	6.02
1302	6.56	21.51	0.502	0.06	5	-104	300	6.12
1307	6.59	21.46	0.501	0	6	-113	300	6.15
1312	6.62	21.42	0.504	0	4	-118	300	6.16
1317	6.64	21.40	0.510	0	5	-122	300	6.17
1322	6.65	21.31	0.526	0	3	-126	300	6.18
1327	6.65	21.26	0.531	0	2	-126	300	6.18
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 ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Rohm and Haas - Former Emca Site Site: Former EMCA Site Well I.D.: MW-06

Date: 8/12/2008 Sampling Personnel: Tim Ifkovich Company: URS Corporation

Purging/Sampling Device: Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: HDPE and Silicone Pump/Tubing Inlet Location: Midpoint of Saturated Screen

Measuring Point: Below Top of Riser Initial Depth to Water: 6.20 Depth to Well Bottom: 18.53 Well Diameter: 1" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 1.9 Estimated Purge Volume (liters): 10.5

Sample ID: 20080812MW-06V13N Sample Time: 1744 QA/QC: None

Sample Parameters: Freon 113, 1113, 123A, Methane and Sulfate

Notes: slightly cloudy to clear, small black flecks in water

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)
1709	6.16	18.10	1.38	0.38	75	-85	300	6.35
1714	5.95	17.53	1.41	0	39	-82	300	6.35
1719	6.00	17.30	1.44	0	30	-88	300	6.36
1724	6.09	17.19	1.45	0	16	-97	300	6.36
1729	6.20	17.08	1.46	0	9	-105	300	6.36
1734	6.31	17.0	1.47	0	5	-113	300	6.36
1739	6.36	17.04	1.47	0	5	-116	300	6.36
1744	6.37	17.0	1.47	0	5	-117	300	6.36
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 ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Rohm and Haas - Former Emca Site Site: Former EMCA Site Well I.D.: MW-07

Date: 8/12/2008 Sampling Personnel: Tim Ifkovich Company: URS Corporation

Purging/Sampling Device: Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: HDPE and Silicone Pump/Tubing Inlet Location: ~9'

Measuring Point: Below Top of Riser Initial Depth to Water: 6.28 Depth to Well Bottom: 9.97 (18.82)* Well Diameter: 1" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 0.57 (1.93)* Estimated Purge Volume (liters): 13.5

Sample ID: 20080812MW-07V09N Sample Time: 1100 QA/QC: None

Sample Parameters: Freon 113, 1113, 123A, Methane and Sulfate

Notes: Could not extend water level meter or tubing past 9.97 ft bgs, well may have been filled with foreign debris.
* Value in parenthesis represent depth and volume using depth from February 2008 sampling event.
grayish color, slight odor, slight sheen, small black flecks in water

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)
1013	6.15	17.57	1.80	0	853	-148	300	8.05
1018	6.18	17.46	1.82	0	422	-152	300	8.21
1023	6.29	17.22	1.88	0	374	-159	300	7.96
1028	6.42	17.15	1.91	0	70	-166	300	7.95
1033	6.44	17.16	1.92	0	50	-167	300	7.96
1038	6.47	17.15	1.93	0	34	-168	300	7.99
1043	6.47	17.13	1.95	0	29	-169	300	8.00
1048	6.48	17.33	1.95	0	27	-168	300	8.00
1053	6.48	17.27	1.98	0	26	-167	300	8.01
1058	6.48	17.26	1.99	0	25	-167	300	8.01
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 ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: Rohm and Haas - Former Emca Site Site: Former EMCA Site Well I.D.: GZ-06

Date: 8/12/2008 Sampling Personnel: Tim Ifkovich Company: URS Corporation

Purging/Sampling Device: Low Flow Peristaltic Pump (GeoPump 2) Tubing Type: HDPE and Silicone Pump/Tubing Inlet Location: Midpoint of Saturated Screen

Measuring Point: Below Top of Riser Initial Depth to Water: 7.73 Depth to Well Bottom: 15.36 Well Diameter: 2" Screen Length: 10'

Casing Type: PVC Volume in 1 Well Casing (liters): 4.71 Estimated Purge Volume (liters): 7.63

Sample ID: 20080812GZ-06V10N Sample Time: 1451 QA/QC: None

Sample Parameters: Freon 113, 1113, 123A, Methane and Sulfate

Notes: slightly turbid, brownish color, slight sheen, very slow recharge
problem with tubing getting clogged at 1400, had to restart purge

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)
1358	6.28	18.57	2.23	0.31	55	-137	300	9.75
Tubing was clogged, restart purge								
1411	6.23	18.21	2.79	0.32	55	-116	300	11.3
1416	6.25	17.58	2.13	0.54	86	-120	300	11.98
1421	6.32	17.21	2.12	0.02	76	-118	300	12.65
1426	6.32	17.66	1.97	0.30	50	-119	175	12.98
1431	6.33	17.85	1.94	0.62	44	-114	150	12.98
1436	6.32	17.74	1.82	0.78	29	-110	150	12.99
1441	6.32	17.73	1.73	0.85	20	-107	150	12.99
1446	6.32	17.64	1.64	0.91	17	-104	150	12.99
1451	6.31	17.53	1.59	0.91	18	-102	150	12.99
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 ($vol_{cyl} = \pi r^2 h$)

APPENDIX B

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

AUGUST 2008 SAMPLING EVENT

FORMER EMCA SITE
SITE NO. 360025
MAMARONECK, NEW YORK

Analyses Performed by:

TESTAMERICA LABORATORIES, INC.
777 NEW DURHAM ROAD
EDISON, NEW JERSEY 08817

Prepared for:

ROHM & HAAS Company
3100 State Road
Croydon, PA 19021

Prepared by:

URS CORPORATION
77 GOODELL STREET
BUFFALO, NY 14203

SEPTEMBER 2008

TABLE OF CONTENTS

TABLES
(Following Text)

ATTACHMENTS
(Following Tables)

I. INTRODUCTION

Analytical data for the six (6) groundwater samples, one field duplicate, one matrix spike/matrix spike duplicate (MS/MSD) pair, and one trip blank were collected by URS personnel on August 12, 2008, as summarized on Table B-1, are discussed in this Data Usability Summary Report (DUSR). The samples were collected as part of the semi-annual groundwater monitoring event at the Former EMCA Site located in Mamaroneck, New York. This 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, Appendix 2B - Guidance for the Development of Data Usability Summary Reports*, December 2002.

II. ANALYTICAL METHODOLOGIES

The groundwater samples were analyzed by TestAmerica Laboratories, Inc., located in Edison, New Jersey, for the following parameters:

Parameter	Method No.	References
Volatile Organic Compounds (VOCs)*	OLM04.3	1
Methane	RSK-175	2
Sulfate	375.4	1

Notes:

* - VOCs include 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113), 1,2-dichloro-1,1,2-trifluoroethane (Freon-123A), and chlorotrifluoroethene (Freon-1113).

References:

1 NYSDEC Analytical Services Protocol, June 2000.

2 USEPA, R.S. Kerr Environmental Research Laboratory, March 15, 1989.

III. DATA VALIDATION

A limited data validation was performed following the guidelines in USEPA Region II *Contract Laboratory Program Organics Data Review and Preliminary Review for Statement of Work OLM04.3*, SOP No. HW-6, Revision 14, September 2006 and the intent of USEPA Region II *Evaluation of Metals Data for the Contract Laboratory Program, based on SOW – ILM05.3*, SOP No. HW-2, Revision 13, September 2006. The validated analytical results are presented in Tables B-2 and B-3. Copies of the validated laboratory results (i.e., Form 1's) are presented in Attachment A. Copies of the case narratives, chain-of-custodies, and documentation supporting the qualification of data are presented in Attachment B. Only problems affecting data usability are discussed in this report.

IV. DATA DELIVERABLE COMPLETENESS

The laboratory deliverable data packages were in accordance with NYSDEC Analytical Services Protocol (ASP) Category B requirements.

V. PRESERVATION/ SAMPLE RECEIPT/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody.

VI. NONCONFORMANCES

There were no analytical nonconformances noted during the limited data review.

VII. SUMMARY

All sample analyses were found to be compliant with the method and validation criteria, and the data are considered usable as reported. URS does not recommend the re-collection of any samples at this time.

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.

D – The sample results are reported from a separate secondary dilution analysis.

TABLE B-1
SAMPLE AND ANALYSIS SUMMARY - AUGUST 2008
FORMER EMCA SITE, MAMARONECK, NEW YORK

SDG Nos.	Sample ID	Matrix	Date of Collection	VOCs*	Methane	Sulfate	Comments
Y278/Y2781	20080812MW-07V09N	GW	08/12/08	X	X	X	---
	20080812MW-03V10N	GW		X	X	X	---
	20080812MW-03V10FD	GW		X	X	X	Field Duplicate of MW-03
	20080812MW-04V08N	GW		X	X	X	---
	20080812GZ-06V10N	GW		X	X	X	---
	20080812MW-02V10N	GW		X	X	X	MS/MSD
	20080812MW-06V13N	GW		X	X	X	---
	20080812TB	Water		X	X	---	Trip Blank

Notes:
* - Volatile Organic Compounds (VOCs) include 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113); 1,2-dichloro-1,1,2-trifluoroethane (Freon-123a); and chlorotrifluoroethene (Freon-1113).

X - Parameter requested.
--- - Parameter not requested/analyzed or no comment.
GW - Groundwater
MS/MSD - Matrix Spike/Matrix Spike Duplicate

TABLE B-2
GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		GZ-06	MW-02	MW-03	MW-03	MW-04
Sample ID		20080812GZ06V10N	20080812MW02V10N	20080812MW03V10FD	20080812MW03V10N	20080812MW04V08N
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		08/12/08	08/12/08	08/12/08	08/12/08	08/12/08
Parameter	Units			Field Duplicate (1-1)		
Volatiles						
Chlorotrifluoroethene (Freon-1113)	UG/L	10 U	160	10	10	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	700	10 U	10 U	10 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	38 J	1.0 J	1.0 J	10 U
Dissolved Gases						
Methane	UG/L	880	6,200	10,000	8,400	290
Miscellaneous Parameters						
Sulfate	MG/L	28.1	47.9	30.0	28.1	5 U

Flags assigned during chemistry validation are shown.

U - Non-Detect
J - Analyte is reported below the PQL at an estimated concentration.
MADE BY: __PRF_09/10/08___ CHKD BY: MLB 9/15/08

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mde
Printed: 9/10/2008 4:44:59 PM
[LOGDATE] = #08/12/08# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE B-2
GROUNDWATER ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		MW-06	MW-07
Sample ID		20080812MW06V13N	20080812MW07V09N
Matrix		Groundwater	Groundwater
Depth Interval (ft)		-	-
Date Sampled		08/12/08	08/12/08
Parameter	**Units**		
Volatiles			
Chlorotrifluoroethene (Freon-1113)	UG/L	4.0 J	170
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U	3.0 J
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U	16
Dissolved Gases			
Methane	UG/L	12,000	5,600
Miscellaneous Parameters			
Sulfate	MG/L	17.8	5.6

Flags assigned during chemistry validation are shown.

U - Non-Detect
J - Analyte is reported below the PQL at an estimated concentration.
MADE BY: __PRF_09/10/08___ CHKD BY: MAS 9/15/08

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mde
Printed: 9/10/2008 4:44:59 PM
[LOGDATE] = #08/12/08# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE B-3
FIELD QC ANALYTICAL RESULTS
FORMER EMCA SITE, MAMARONECK, NEW YORK

Location ID		FIELDQC
Sample ID		20080812TB
Matrix		Water
Depth Interval (ft)		-
Date Sampled		08/12/08
Parameter	Units	Trip Blank (1-1)
Volatiles		
Chlorotrifluoroethene (Freon-1113)	UG/L	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113)	UG/L	10 U
1,2-Dichloro-1,1,2-trifluoroethane (Freon-123A)	UG/L	10 U
Dissolved Gases		
Methane	UG/L	5.0 U

Flags assigned during chemistry validation are shown.

U - Non-Detect

MADE BY: __PRF_09/10/08___ CHKD BY: MFB 9/15/08

Detection Limits shown are PQL

N:\11172730.00000\DB\PROGRAM\EDMS.mde
Printed: 9/10/2008 4:43:22 PM
[LOGDATE] = #08/12/08# AND [MATRIX] = 'WQ' AND [SACODE] = 'TB'

ATTACHMENT A

VALIDATED ANALYTICAL RESULTS (FORM 1's)

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW07V09N

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942896

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08669

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	3	J
79-38-9	Chlorotrifluoroethene	170	
354-23-4	1,2-Dichlorotrifluoroethane	16	

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW03V10N

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942897

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08660

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U
79-38-9	Chlorotrifluoroethene	10	
354-23-4	1,2-Dichlorotrifluoroethane	1	J

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW03V10FD

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942898

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08668

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U
79-38-9	Chlorotrifluoroethene	10	U
354-23-4	1,2-Dichlorotrifluoroethane	1	J

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW04V08N

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942899

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08662

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U
79-38-9	Chlorotrifluoroethene	10	U
354-23-4	1,2-Dichlorotrifluoroethane	10	U

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GZ06V10N

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942900

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08663

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U
79-38-9	Chlorotrifluoroethene	10	U
354-23-4	1,2-Dichlorotrifluoroethane	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW02V10N

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942901

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08665

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	700	
79-38-9	Chlorotrifluoroethene	160	
354-23-4	1,2-Dichlorotrifluoroethane	38	J

FORM I VOA-1 OLM04.2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW06V13N

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942902

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08664

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U
79-38-9	Chlorotrifluoroethene	4	J
354-23-4	1,2-Dichlorotrifluoroethane	10	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: TESTAMERICA EDISON Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Y2781

Matrix: (soil/water) WATER Lab Sample ID: 942903

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V08659

Level: (low/med) LOW Date Received: 08/14/08

% Moisture: not dec. _____ Date Analyzed: 08/20/08

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
76-13-1	112-Trichlorotrifluoroethane	10	U	
79-38-9	Chlorotrifluoroethene	10	U	
354-23-4	1,2-Dichlorotrifluoroethane	10	U	

FORM I VOA-1 OLM04.2

Client ID: **MW07V09N**
Site: Former EMCA Site

Lab Sample No: **942896**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6072.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 100.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	5600	500

Client ID: **MW03V10N**
Site: Former EMCA Site

Lab Sample No: **942897**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6073.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 100.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	8400	500

Client ID: **MW03V10FD**
Site: Former EMCA Site

Lab Sample No: **942898**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6074.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 100.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	10000	500

Client ID: **MW04V08N**
Site: Former EMCA Site

Lab Sample No: **942899**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6075.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 5.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	290	25

Client ID: **GZ06V10N**
Site: Former EMCA Site

Lab Sample No: **942900**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6076.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 20.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	880	100

Client ID: **MW02V10N**
Site: Former EMCA Site

Lab Sample No: **942901**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6077.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 100.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	6200	500

Client ID: **MW06V13N**
Site: Former EMCA Site

Lab Sample No: **942902**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/20/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6078.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 100.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	12000	500

Client ID: **TB**
Site: Former EMCA Site

Lab Sample No: **942903**
Lab Job No: Y278

Date Sampled: 08/12/08
Date Received: 08/14/08
Date Analyzed: 08/19/08
GC Column: GS-Q
Instrument ID: VSCREEN5.i
Lab File ID: scrf6049.d

Matrix: WATER
Level: MED
Purge Volume: 10.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

METHANE, ETHANE, ETHENE
METHOD 3810

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Methane	ND	5.0

Lab Job No: Y278

Matrix: WATER

Site: Former EMCA Site

QA Batch: 2609

Sulfate

Lab ID	Client ID	Date Sampled	Date Analyzed	Percent Moisture	DF	Analytical Result Units: mg/l	Reporting Limit Units: mg/l
942896	MW07V09N	08/12/08	08/20/08	-	1.0	5.6	5.00*
942897	MW03V10N	08/12/08	08/20/08	-	1.0	28.1	5.00*
942898	MW03V10FD	08/12/08	08/20/08	-	1.0	30.0	5.00*
942899	MW04V08N	08/12/08	08/20/08	-	1.0	ND	5.00*
942900	GZ06V10N	08/12/08	08/20/08	-	1.0	28.1	5.00*
942901	MW02V10N	08/12/08	08/20/08	-	4.0	47.9	20.00*
942902	MW06V13N	08/12/08	08/20/08	-	1.0	17.8	5.00*

* Reported RL is adjusted for Dilution Factor and/or Percent Moisture.

** The unadjusted RL for Sulfate = 5.0 mg/l.

ATTACHMENT B

SUPPORT DOCUMENTATION

Y2781

CHAIN OF CUSTODY RECORD

URS

PROJECT NO. 11174947.00000

SITE NAME Former EMCA Site

LAB Test America Edison

COOLER 1 of 1

PAGE 1 of 1

SAMPLERS (PRINT/SIGNATURE) Tim Ifkovich Tim Ifkovich

DELIVERY SERVICE: Fedex AIRBILL NO.: 8645 1193 8930

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	TESTS: Freon 113, 1113, 123 (CLP OLM04.2A)	TESTS: Methane (RSK-175)	TESTS: Sulfate (375.4)	BOTTLE TYPE AND PRESERVATIVE: 40mL Vial (HCL)	BOTTLE TYPE AND PRESERVATIVE: 40mL Vial (HCL)	BOTTLE TYPE AND PRESERVATIVE: 500mL Poly	REMARKS: Y278	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (ERPIMS)
MW-07	8/12/08	1100	G	20080812 MW-07V09N	WG	7				3	3	1	942896	N1			
MW-03		1215		20080812 MW-03V10N		7				3	3	1	942897	N1			
MW-03		1215		20080812 MW-03V10FD		7				3	3	1	942898	FD1			
MW-04		1328		20080812 MW-04V08N		7				3	3	1	942899	N1			
GZ-06		1451		20080812 GZ-06V10N		7				3	3	1	942900	N1			
MW-02		1559		20080812 MW-02V10N		7				3	3	1	942901	N1			
MW-02		1559		20080812 MW-02V10MS		7				3	3	1	942901	MS1			
MW-02		1559		20080812 MW-02V10SD		7				3	3	1	942901	SD1			
MW-06		1744		20080812 MW-06V13N		7				3	3	1	942902	N1			
Trip Blank	—	—	—	20080812 TB	WQ	2				1	1	—	942903	TB1			

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)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
			fedex		
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
Tim Ifkovich	8/13/08	0900		8/14/08	1005

SPECIAL INSTRUCTIONS

For Questions Contact

Peter Fairbanks @ 716-856-5636

1°C IR90

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/1 OF 1/CofCR/GCM

TestAmerica Edison

13

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
777 New Durham Rd
Edison, NJ 08817
Ph. 732 549-3900 * *Fax* 732 549-3679

SDG NARRATIVE

TEST AMERICA

SDG No. Y2871

TA Edison Sample	Client ID
942896	MW07V09N
942897	MW03V10N
942898	MW03V10FD
942899	MW04V08N
942900	GZ06V10N
942901	MW02V10N
942902	MW06V13N
942903	TB

Sample Receipt:

Sample delivery conforms to requirements.

CLP Volatile Organics (GC/MS):

All data conform to method requirements.

I certify that this data package is in compliance with the terms of the contract (OLC04.2) both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the laboratory manager or his designee.

Tom Tanico
Project Manager

9/4/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Nonconformance Summary

TestAmerica Edison Job # : Y278

Client: URS Greiner-NY

Date: 8/29/2008

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC):

All data conforms with method requirements.

Wet Chemistry:

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Director or their designee, as verified by the following signature.

Thomas Tanico
Project Manager