

**NAPL AND GROUNDWATER GAUGING REPORT FOR PERFORMANCE MONITORING OF ISS IRM
FOR EAST STATION FORMER MGP SITE ROCHESTER, NEW YORK
OCTOBER 22-23, 2013 MONITORING EVENT**

December 2013

Prepared for:

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1.0 INTRODUCTION

This **NAPL and Groundwater Gauging Report**, dated November 2013, has been prepared to summarize the findings of the field sampling event performed on October 22 and 23, 2013, at the Rochester Gas & Electric Corporation's (RG&E's) East Station former MGP Site, located in Rochester, New York. This sampling event was performed according to the NYSDEC approved "**The proposed East Station 2013-2018 ISS IRM Monitoring Plan for groundwater level and NAPL gauging and recovery**" (Performance Monitoring Plan), dated February 2013. Table 1 lists the monitoring and recovery wells that were gauged. Figure 1 shows the locations of the wells.

Please refer to the following reports prepared and submitted to the NYSDEC for the previously completed monitoring activities at the East Station Site:

1. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York", dated November 2009.
2. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, May 4 and 5, 2010 Monitoring Event", dated June 2010.
3. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, November 17, 18 and 19, 2009 Monitoring Event", dated February 2010.
4. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, October 12 and 13, 2010 Monitoring Event", dated January 2011
5. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, May 16, 17 and 18, 2011 Monitoring Event", dated July 2011
6. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, November 3 and 4, 2011 Monitoring Event", dated January 2012
7. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, May 14 and 15, 2012 Monitoring Event", dated July 2012
8. NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, October 17 and 18, 2012 Monitoring Event", dated January 2013
9. Summary report, "NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, for the monitoring period from January 2009 through December, 2012", dated February 2013

Please refer to the document titled "**Summary of the Installation and Monitoring of Groundwater Wells for Water Quality and NAPL at the East Station Site following the Completion of the ISS-IRM**" dated September 4, 2008, for information regarding the additional 13 monitoring/recovery wells installed and the monitoring frequency and reporting schedule.

2.0 FIELD ACTIVITIES

Field activities performed on October 22 and 23, 2013, consisted of recording static water levels and gauging for LNAPL and DNAPL in 30 monitoring/recovery wells. The methods used for groundwater level

measurements, NAPL gauging and groundwater sample collection for this performance monitoring event were consistent with those used for previous monitoring events and in past site investigation work. Field activities performed are identified in Table 1.

3.0 GROUNDWATER FLOW CHARACTERISTICS

The groundwater elevation data is presented in Table 2. Since the locations that were gauged during the October 2013 sampling event consist of a relatively linear network of wells, a groundwater contour figure was not generated for this data set. Based on results of previous groundwater contours (see the NAPL and Groundwater Monitoring Report, dated November 2009, Figures 5 through 8), groundwater flow is generally from the eastern site area, westerly towards the ISS columns.

In the northern area of the site, groundwater flow is generally to the northwest. In the southern area of the site, groundwater flow is generally to the southwest.

4.0 NAPL GAUGING RESULTS

During the October 23, 2013 gauging event, approximately 0.3 feet of LNAPL was measured in recovery well RW-5. In addition, measurable DNAPL was recorded in monitoring wells DW-3R (0.3 feet), MW-5R (0.3 feet) and recovery well RW-6 (0.2 feet). Finally, DNAPL trace amounts of DNPL were noted in RW-9, RW-10 and RW-11.

5.0 SUMMARY OF OBSERVATIONS FROM OCTOBER 2013 SAMPLING EVENT

The information collected during the October 2013 monitoring event leads to the following observations:

- Approximately 0.3 feet of LNAPL was measured in recovery well RW-5.
- Measurable DNAPL was recorded in monitoring wells DW-3R (0.3 feet), MW-5R (0.3 feet) and recovery well RW-6 (0.2 feet).
- Groundwater elevations in the monitored wells in the shallow bedrock are nearly constant for the monitoring period since 2009.

6.0 REFERENCES

Ish Inc. Summary report, "NAPL and Groundwater Gauging Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, for the monitoring period from January 2009 through December, 2012", February 2013

Ish Inc. The proposed East Station 2013-2018 ISS IRM Monitoring Plan for groundwater level and NAPL gauging and recovery, February 2013

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, October 17 and 18, 2012 Monitoring Event, July 2012.

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, May 14 and 15, 2012 Monitoring Event, July 2012.

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, November 3 and 4, 2011 Monitoring Event, January 2012.

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, May 16, 17 and 18, 2011 Monitoring Event, July 2011.

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, October 12 and 13, 2010 Monitoring Event, January 2011.

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, May 4 and 5, 2010 Monitoring Event, June 2010.

Ish Inc. ISS IRM NAPL Monitoring and Recovery and Water Quality Monitoring Plan for the East Station former MGP Site, Revised April 2010.

Ish Inc. NAPL and Groundwater Monitoring Report for Performance Monitoring of ISS IRM for East Station Former MGP Site, Rochester, New York, November 2009.

Ish Inc. Phase IV Interim Remedial Measure Completion Report for East Station ISS/IRM, submitted to NYSDEC March 2009, Approved September 2009.

Ish Inc., Installation and Monitoring of Groundwater Wells for Water Quality and NAPL at the East Station Site following the Completion of the ISS-IRM, September 4, 2008

Ish Inc. Draft IRM Work Plan for *In-situ* Stabilization/Solidification to Control NAPL Seeps at the RG&E East Station Former Manufactured Gas Plant Site, October 2003

TABLES

TABLE 1
SUMMARY OF MONITORING WELL GAUGING AND SAMPLING EVENTS FOR PERFORMANCE MONITORING AND NAPL RECOVERY WELLS
RG&E East Station Former MGP Site
Rochester, New York

Well ID	October 13-15, 2008			February 9 and 10, 2009			May 18 and 19, 2009		August 17 and 18, 2009		November 17, 2009		May 4 and 5, 2010		
	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Depth to Groundwater	NAPL Monitoring	Depth to Groundwater	NAPL Monitoring	Depth to Groundwater	NAPL Monitoring	Analytical Sampling	Depth to Groundwater
Shallow Bedrock Monitoring Wells:															
DW-1R	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DW-3R	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MW-3DR	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MW-5R	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MW-8DR	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
ISS Barrier Monitoring Wells:															
MW-2R	x	x	x	x	NS	x	x	x	x	x	x	x	x	NS	x
MW-4R	x	x	x	x	NS	x	x	x	x	x	x	x	x	NS	x
PZ-01R	x	x	x	x	NS	x	x	x	x	x	x	x	x	NS	x
Recovery Wells in the NAPL Collection Trench															
RW-1	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-2	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-3	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-4	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-5	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-6	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-7	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-8	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-9	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-10	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-11	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-12	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-13	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-14	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-15	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-16	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-17	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-18	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-19	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-20	x	NS	x	x	NS	x	x	x	x	x	x	x	x	NS	x
Recovery Wells to the East of ISS IRM Area															
RW-21	x	x	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-22	x	x	x	x	NS	x	x	x	x	x	x	x	x	NS	x
RW-23	x	x	x	x	NS	x	x	x	x	x	x	x	NG	NS	NG
Shallow Monitoring Wells to the East of ISS IRM Area															
TPMW-1	x	x	x	x	x	x	x	x	x	x	x	x	NG	NS	NG
TPMW-2	x	x	x	x	x	x	x	x	x	x	x	x	NG	NS	NG

Notes:
x NAPL gauging and/or water quality analysis sampling performed
NS Not Sampled for water quality analysis
NG No NAPL gauging performed. These wells not included in the revised performance monitoring plan

TABLE 1
SUMMARY OF MONITORING WELL GAUGING AND SAMPLING EVENTS FOR PERFORMANCE MONITORING AND NAPL RECOVERY WELLS
 RG&E East Station Former MGP Site
 Rochester, New York

Well ID	October 12 and 13, 2010			May 16-18, 2011			November 3-4, 2011			May 14-15, 2012			October 17-18, 2012			October 22-23, 2013	
	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Analytical Sampling	Depth to Groundwater	NAPL Monitoring	Depth to Groundwater
Shallow Bedrock Monitoring Wells:																	
DW-1R	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
DW-3R	x	x	x	x	x	x	x	NS	x	x	NS	x	x	x	x	x	x
MW-3DR	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MW-5R	x	x	x	x	NS	x	x	NS	x	x	NS	x	x	x	x	x	x
MW-8DR	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
ISS Barrier Monitoring Wells:																	
MW-2R	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
MW-4R	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
PZ-01R	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
Recovery Wells in the NAPL Collection Trench																	
RW-1	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-2	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-3	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-4	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-5	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-6	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-7	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-8	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-9	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-10	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-11	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-12	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-13	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-14	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-15	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-16	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-17	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-18	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-19	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-20	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
Recovery Wells to the East of ISS IRM Area																	
RW-21	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-22	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	NS	x	x	x
RW-23	NG	NS	NG	NG	NS	NG	NG	NS	NG	NS	NG	NG	NS	NG	NG	NG	NG
Shallow Monitoring Wells to the East of ISS IRM Area																	
TPMW-1	NG	NS	NG	NG	NS	NG	NG	NS	NG	NS	NG	NG	NS	NG	NG	NG	NG
TPMW-2	NG	NS	NG	NG	NS	NG	NG	NS	NG	NS	NG	NG	NS	NG	NG	NG	NG

Notes:
 x NAPL gauging and/or water quality analysis sampling performed
 NS Not Sampled for water quality analysis
 NG No NAPL gauging performed. These wells not included in the revised performance monitoring plan

TABLE 2
GROUNDWATER ELEVATIONS AND NAPL MEASUREMENTS
RG&E East Station Former MGP Site
Rochester, New York

Well ID	TOC ⁽¹⁾ Elevation ⁽²⁾	October 13, 2008				February 9 and 10, 2009				May 18, 2009				August 17 and 18, 2009			
		Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾
Shallow Bedrock Monitoring Wells																	
DW-1R	401.04	14.61	NP ⁽³⁾	NP	386.43	9.43	NP	NP	391.61	10.26	TRACE	NP	390.78	10.31	NP	NP	390.73
DW-3R	407.42	18.90	NP	NP	388.52	16.26	NP	NP	391.16	15.97	NP	NP	391.45	15.56	NP	NP	391.86
MW-3DR	401.02	14.54	NP	NP	386.48	9.40	NP	NP	391.62	10.26	NP	NP	390.76	10.31	NP	NP	390.71
MW-5R	410.50	18.93	TRACE	NP	391.57	17.56	NP	NP	392.94	17.43	NP	NP	393.07	16.74	TRACE	NP	393.76
MW-8DR	411.63	20.64	NP	NP	390.99	17.74	NP	NP	393.89	18.16	NP	NP	393.47	17.17	NP	NP	394.46
ISS Barrier Monitoring Wells																	
MW-2R	401.62	15.28	NP	NP	386.34	1.10	NP	NP	400.52	10.89	NP	NP	390.73	10.94	NP	NP	390.68
MW-4R	403.25	14.83	NP	NP	388.42	11.42	NP	NP	391.83	11.58	TRACE	NP	391.67	11.07	NP	NP	392.18
PZ-01R	411.80	21.71	NP	NP	390.09	20.12	NP	NP	391.68	19.84	TRACE	NP	391.96	19.48	NP	NP	392.32
Recovery Wells																	
RW-1	412.71	18.38	NP	NP	394.33	16.81	NP	NP	395.90	18.15	NP	NP	394.56	17.47	NP	NP	395.24
RW-2	412.51	18.13	NP	NP	394.38	16.54	NP	NP	395.97	17.83	NP	NP	394.68	17.20	NP	NP	395.31
RW-3	412.35	17.94	NP	NP	394.41	16.35	NP	NP	396.00	17.70	NP	NP	394.65	17.00	NP	NP	395.35
RW-4	411.97	17.54	NP	NP	394.43	15.91	NP	NP	396.06	17.30	NP	NP	394.67	16.61	NP	NP	395.36
RW-5	411.86	17.22	NP	NP	394.64	17.80	0.03	NP	394.09	NM ⁽⁴⁾	NM	NM	16.47	0.04	NP	NP	395.43
RW-6	410.17	16.03	NP	NP	394.14	14.06	NP	NP	396.11	15.51	NP	NP	394.66	15.29	NP	NP	394.88
RW-7	410.25	16.03	NP	NP	394.22	14.00	NP	NP	396.25	15.54	TRACE	NP	394.71	15.32	NP	NP	394.93
RW-8	407.69	13.61	NP	NP	394.08	11.55	NP	NP	396.14	12.97	NP	NP	394.72	12.76	NP	NP	394.93
RW-9	406.90	13.00	NP	NP	393.90	10.71	NP	NP	396.19	12.22	TRACE	NP	394.68	11.95	NP	NP	394.95
RW-10	405.53	12.17	NP	NP	393.36	9.34	NP	NP	396.19	10.93	NP	NP	394.60	10.66	NP	NP	394.87
RW-11	404.19	11.42	NP	NP	392.77	8.02	NP	NP	396.17	9.63	NP	NP	394.56	9.39	NP	NP	394.80
RW-12	403.60	11.23	TRACE	NP	392.37	7.65	NP	NP	395.95	9.08	NP	NP	394.52	8.80	NP	NP	394.80
RW-13	404.64	12.49	TRACE	NP	392.15	9.21	NP	NP	395.43	10.56	NP	NP	394.08	10.35	NP	NP	394.29
RW-14	401.72	9.51	NP	NP	392.21	6.70	NP	NP	395.02	7.67	NP	NP	394.05	7.45	NP	NP	394.27
RW-15	401.86	9.66	NP	NP	392.20	6.97	TRACE	NP	394.89	7.86	NP	NP	394.00	7.66	NP	NP	394.20
RW-16	402.08	9.82	NP	NP	392.26	7.17	NP	NP	394.91	8.06	NP	NP	394.02	7.85	NP	NP	394.23
RW-17	402.02	9.75	NP	NP	392.27	7.16	NP	NP	394.86	8.00	NP	NP	394.02	7.80	NP	NP	394.22
RW-18	402.49	10.25	NP	NP	392.24	7.61	NP	NP	394.88	8.47	NP	NP	394.02	8.27	NP	NP	394.22
RW-19	402.43	10.18	NP	NP	392.25	7.52	TRACE	NP	394.91	8.43	NP	NP	394.00	8.23	NP	NP	394.20
RW-20	406.02	13.74	NP	NP	392.28	11.12	NP	NP	394.90	12.00	NP	NP	394.02	11.80	NP	NP	394.22
RW-21	403.25	11.03	NP	NP	392.22	7.11	NP	NP	396.14	8.93	TRACE	NP	394.32	8.71	NP	NP	394.54
RW-22	403.64	11.56	NP	NP	392.08	7.54	NP	NP	396.10	9.34	TRACE	NP	394.30	9.14	NP	NP	394.50
RW-23	413.72	16.13	NP	NP	397.59	14.00	NP	NP	399.72	14.86	NP	NP	398.86	14.52	NP	NP	399.20
Shallow Monitoring Wells																	
TPMW-1	419.06	19.54	NP	NP	399.52	17.65	NP	NP	401.41	18.17	NP	NP	400.89	17.60	NP	NP	401.46
TPMW-2	414.79	17.46	NP	NP	397.33	11.47	TRACE	NP	403.32	15.72	NP	NP	399.07	15.62	NP	NP	399.17

Notes:

- (1) TOC - top of casing
- (2) Well elevation datum is NAVD 1988. Groundwater elevation calculated as elevation of the groundwater in the well plus the thickness of LNAPL (when present) based on assumption of an LNAPL density of approximately 1.
- (3) NP - Not Present
- (4) NM - Not Measured
- (5) During the May 4, 2010 gauging, trace DNAPL was measured in DW-3R. After purging well, 0.33 feet of DNAPL was measured on May 5, 2010

TABLE 2
GROUNDWATER ELEVATIONS AND NAPL MEASUREMENTS
RG&E East Station Former MGP Site
Rochester, New York

Well ID	TOC ⁽¹⁾ Elevation ⁽²⁾	November 17, 2009				May 4 and 5, 2010				October 12 and 13, 2010				May 16, 2011			
		Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾
Shallow Bedrock Monitoring Wells																	
DW-1R	401.04	10.39	TRACE	NP	390.65	10.21	NP	NP	390.83	10.33	NP	NP	390.71	10.12	NP	NP	390.92
DW-3R	407.42	15.55	NP	NP	391.87	15.65	NP	0.33 ⁽⁵⁾	391.77	15.50	NP	0.05	391.92	14.09	NP	0.02	393.33
MW-3DR	401.02	11.33	NP	NP	389.69	10.20	NP	NP	390.82	9.86	NP	NP	391.16	10.15	NP	NP	390.87
MW-5R	410.50	17.32	NP	NP	393.18	17.04	NP	0.21	393.46	17.08	NP	0.10	393.42	15.63	NP	0.08	394.87
MW-8DR	411.63	18.11	NP	NP	393.52	18.00	NP	NP	393.63	18.65	NP	NP	392.98	17.48	NP	NP	394.15
ISS Barrier Monitoring Wells																	
MW-2R	401.62	10.87	NP	NP	390.75	10.75	NP	NP	390.87	10.45	NP	NP	391.17	10.88	NP	NP	390.74
MW-4R	403.25	11.59	NP	NP	391.66	11.31	NP	NP	391.94	11.16	NP	NP	392.09	10.49	NP	NP	392.76
PZ-01R	411.80	19.51	TRACE	NP	392.29	19.40	NP	NP	392.40	18.85	NP	NP	392.95	18.30	NP	NP	393.50
Recovery Wells																	
RW-1	412.71	17.49	NP	NP	395.22	17.55	NP	NP	395.16	16.91	NP	NP	395.80	15.05	NP	NP	397.66
RW-2	412.51	17.52	NP	NP	394.99	17.26	NP	NP	395.25	16.65	NP	NP	395.86	14.25	NP	NP	398.26
RW-3	412.35	17.54	NP	NP	394.81	17.05	NP	NP	395.30	16.45	NP	NP	395.90	14.41	NP	NP	397.94
RW-4	411.97	16.96	NP	NP	395.01	16.66	NP	NP	395.31	16.03	NP	NP	395.94	14.05	NP	NP	397.92
RW-5	411.86	16.64	0.08	NP	395.30	16.62	0.07	1.35	395.31	16.10	0.15	NP	395.91	13.81	0.08	NP	398.13
RW-6	410.17	15.45	NP	NP	394.72	14.68	NP	NP	395.49	14.31	NP	NP	395.86	12.08	NP	NP	398.09
RW-7	410.25	15.53	NP	NP	394.72	14.72	NP	TRACE	395.53	14.30	NP	NP	395.95	12.11	NP	NP	398.14
RW-8	407.69	12.97	NP	NP	394.72	12.11	NP	NP	395.58	11.74	NP	NP	395.95	9.54	NP	NP	398.15
RW-9	406.90	12.26	NP	NP	394.64	11.35	NP	NP	395.55	10.90	NP	NP	396.00	8.76	NP	NP	398.14
RW-10	405.53	10.95	NP	NP	394.58	9.95	NP	NP	395.58	9.55	NP	NP	395.98	7.34	NP	NP	398.19
RW-11	404.19	9.69	NP	NP	394.50	8.66	TRACE	NP	395.53	8.26	NP	NP	395.93	6.05	NP	TRACE	398.14
RW-12	403.60	9.06	NP	NP	394.54	8.07	NP	NP	395.53	7.65	NP	NP	395.95	5.40	NP	TRACE	398.20
RW-13	404.64	10.43	NP	NP	394.21	9.57	NP	TRACE	395.07	9.11	NP	NP	395.53	6.98	NP	NP	397.66
RW-14	401.72	7.90	NP	NP	393.82	6.68	NP	NP	395.04	6.20	NP	NP	395.52	4.16	NP	NP	397.56
RW-15	401.86	8.16	NP	NP	393.70	6.82	NP	TRACE	395.04	6.35	NP	NP	395.51	4.31	NP	NP	397.55
RW-16	402.08	7.96	NP	NP	394.12	7.01	NP	NP	395.07	6.58	NP	NP	395.50	4.54	NP	NP	397.54
RW-17	402.02	7.84	NP	NP	394.18	6.97	NP	NP	395.05	6.51	NP	NP	395.51	4.49	NP	NP	397.53
RW-18	402.49	9.03	NP	NP	393.46	7.50	NP	NP	394.99	7.03	NP	NP	395.46	4.95	NP	NP	397.54
RW-19	402.43	8.30	NP	NP	394.13	7.45	NP	NP	394.98	7.00	NP	NP	395.43	5.93	NP	TRACE	396.50
RW-20	406.02	11.85	NP	NP	394.17	10.95	NP	NP	395.07	10.51	NP	NP	395.51	8.46	NP	TRACE	397.56
RW-21	403.25	8.93	TRACE	NP	394.32	7.83	NP	NP	395.42	7.42	NP	NP	395.83	5.06	NP	NP	398.19
RW-22	403.64	9.35	TRACE	NP	394.29	8.30	NP	NP	395.34	7.88	NP	NP	395.76	5.56	NP	NP	398.08
RW-23	413.72	9.84	NP	NP	403.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Shallow Monitoring Wells																	
TPMW-1	419.06	18.74	NP	NP	400.32	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
TPMW-2	414.79	16.09	NP	NP	398.70	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

- (1) TOC - top of casing
- (2) Well elevation datum is NAVD 1988. Groundwater elevation calculated as elevation of the groundwater in the well plus the thickness of LNAPL (when present) based on assumption of an LNAPL density of approximately 1.
- (3) NP - Not Present
- (4) NM - Not Measured
- (5) During the May 4, 2010 gauging, trace DNAPL was measured in DW-3R. After purging well, 0.33 feet of DNAPL was measured on May 5, 2010

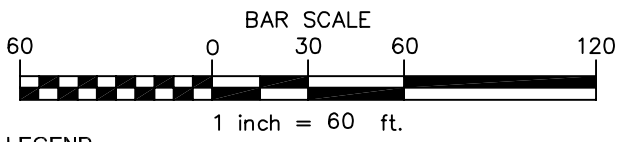
TABLE 2
GROUNDWATER ELEVATIONS AND NAPL MEASUREMENTS
RG&E East Station Former MGP Site
Rochester, New York

Well ID	TOC ⁽¹⁾ Elevation ⁽²⁾	November 3, 2011				May 14, 2012				October 17, 2012				October 22 and 23, 2013			
		Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾	Depth to Groundwater (feet from TOC)	LNAPL Thickness (feet)	DNAPL Thickness (feet)	Groundwater Elevation ⁽²⁾
Shallow Bedrock Monitoring Wells																	
DW-1R	401.04	11.58	NP	NP	389.46	10.25	NP	NP	390.79	10.95	NP	NP	390.09	9.69	NP	NP	391.35
DW-3R	407.42	15.35	NP	0.40	392.07	15.28	NP	0.30	392.14	15.51	NP	0.17	391.91	14.37	NP	0.3	393.05
MW-3DR	401.02	11.56	NP	NP	389.46	10.22	NP	NP	390.80	10.92	NP	NP	390.10	9.62	NP	NP	391.40
MW-5R	410.50	16.15	NP	0.10	394.35	16.31	NP	0.35	394.19	16.73	NP	TRACE	393.77	16.51	NP	0.3	393.99
MW-8DR	411.63	18.15	NP	NP	393.48	17.98	NP	NP	393.65	18.71	NP	NP	392.92	17.95	NP	NP	393.68
ISS Barrier Monitoring Wells																	
MW-2R	401.62	12.15	NP	NP	389.47	10.81	NP	NP	390.81	12.55	NP	NP	389.07	10.24	NP	NP	391.38
MW-4R	403.25	11.38	NP	NP	391.87	11.11	NP	NP	392.14	11.91	NP	NP	391.34	10.86	NP	NP	392.39
PZ-01R	411.80	20.09	NP	NP	391.71	19.19	NP	NP	392.61	19.35	NP	NP	392.45	18.95	NP	NP	392.85
Recovery Wells																	
RW-1	412.71	15.65	NP	NP	397.06	16.15	NP	NP	396.56	17.10	NP	NP	395.61	17.15	NP	NP	395.56
RW-2	412.51	15.41	NP	NP	397.10	15.90	NP	NP	396.61	16.88	NP	NP	395.63	16.86	NP	NP	395.65
RW-3	412.35	15.19	NP	NP	397.16	15.70	NP	NP	396.65	16.65	NP	NP	395.70	16.69	NP	NP	395.66
RW-4	411.97	14.75	NP	NP	397.22	15.20	NP	NP	396.77	16.27	NP	NP	395.70	16.31	NP	NP	395.66
RW-5	411.86	14.70	0.80	NP	397.96	15.25	0.15	NP	396.76	16.21	0.17	NP	395.82	16.5	0.3	NP	395.36
RW-6	410.17	12.95	NP	NP	397.22	13.45	NP	NP	396.72	14.50	NP	NP	395.67	14.49	NP	0.2	395.68
RW-7	410.25	14.99	NP	NP	395.26	13.48	NP	NP	396.77	14.54	NP	NP	395.71	14.53	NP	NP	395.72
RW-8	407.69	10.29	NP	NP	397.40	10.75	NP	NP	396.94	11.90	NP	NP	395.79	11.95	NP	NP	395.74
RW-9	406.90	9.57	NP	NP	397.33	10.05	NP	NP	396.85	11.07	NP	NP	395.83	11.15	NP	TRACE	395.75
RW-10	405.53	8.87	NP	NP	396.66	8.65	NP	NP	396.88	9.71	NP	TRACE	395.82	9.85	NP	TRACE	395.68
RW-11	404.19	6.66	NP	NP	397.53	7.30	TRACE	NP	396.89	8.38	NP	TRACE	395.81	8.48	NP	TRACE	395.71
RW-12	403.60	6.15	NP	NP	397.45	6.75	NP	NP	396.85	7.81	NP	NP	395.79	7.85	NP	NP	395.75
RW-13	404.64	7.75	NP	NP	396.89	8.50	NP	NP	396.14	9.13	NP	TRACE	395.51	9.09	NP	NP	395.55
RW-14	401.72	4.95	NP	NP	396.77	5.30	NP	NP	396.42	6.25	NP	NP	395.47	6.25	NP	NP	395.47
RW-15	401.86	5.11	NP	NP	396.75	5.45	NP	NP	396.41	9.47	NP	TRACE	392.39	6.43	NP	NP	395.43
RW-16	402.08	5.32	NP	NP	396.76	5.70	NP	NP	396.38	9.65	NP	NP	392.43	6.54	NP	NP	395.54
RW-17	402.02	5.28	NP	NP	396.74	5.65	NP	NP	396.37	6.61	NP	NP	395.41	6.51	NP	NP	395.51
RW-18	402.49	5.79	NP	NP	396.70	6.15	NP	NP	396.34	7.05	NP	NP	395.44	7	NP	NP	395.49
RW-19	402.43	5.73	NP	NP	396.70	6.05	NP	NP	396.38	7.03	NP	NP	395.40	6.93	NP	NP	395.5
RW-20	406.02	9.27	NP	NP	396.75	9.65	NP	NP	396.37	10.58	NP	NP	395.44	10.5	NP	NP	395.52
RW-21	403.25	5.85	NP	NP	397.40	6.40	NP	NP	396.85	7.51	NP	NP	395.74	7.52	NP	NP	395.73
RW-22	403.64	6.34	NP	NP	397.30	6.80	TRACE	NP	396.84	7.98	NP	TRACE	395.66	7.96	NP	NP	395.68
RW-23	413.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Shallow Monitoring Wells																	
TPMW-1	419.06	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
TPMW-2	414.79	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM








Notes:

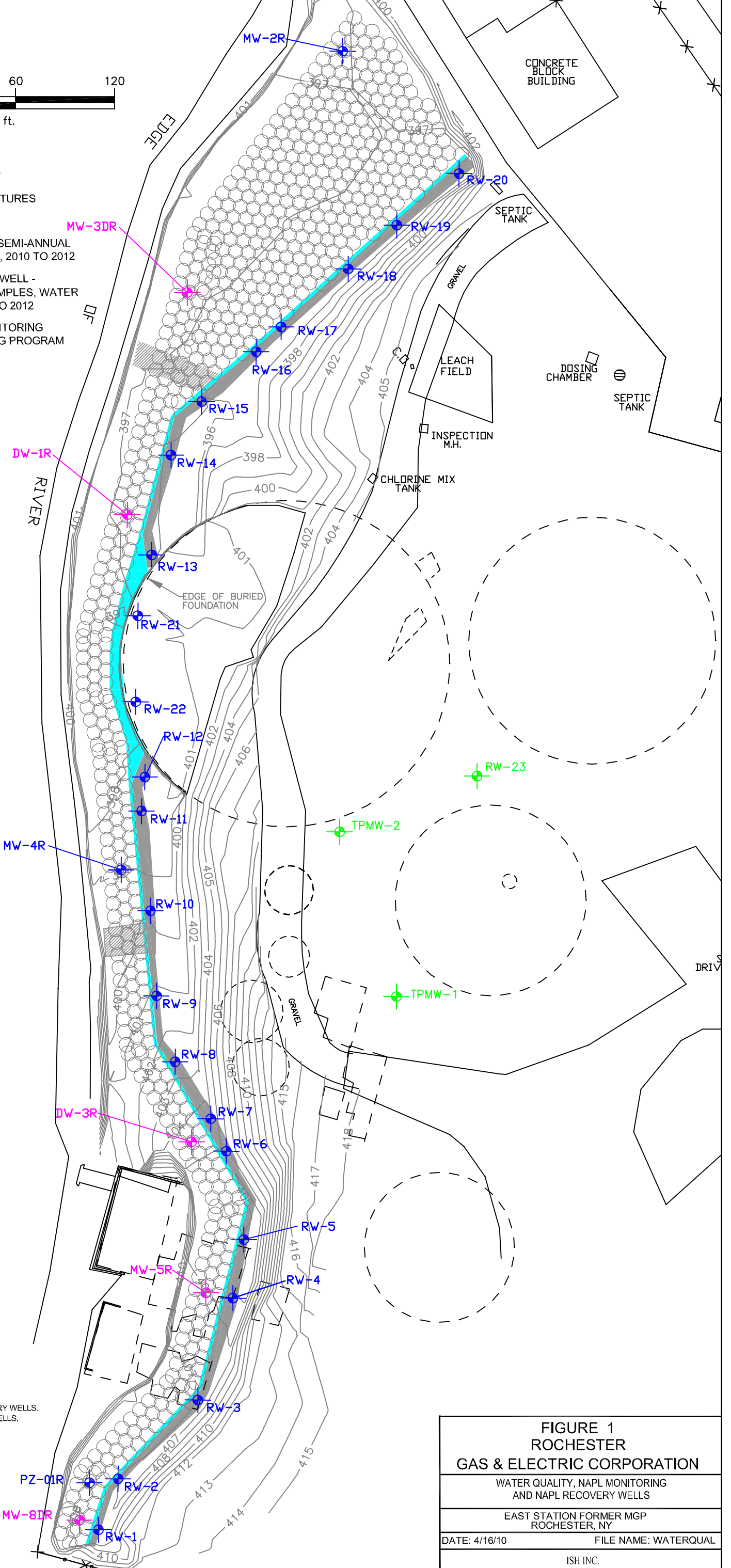
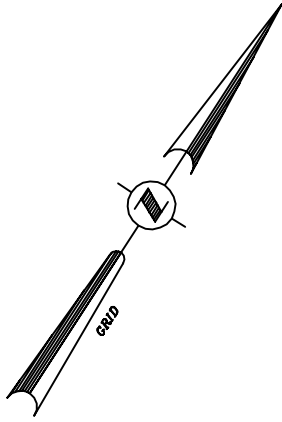
- (1) TOC - top of casing
- (2) Well elevation datum is NAVD 1988. Groundwater elevation calculated as elevation of the groundwater in the well plus the thickness of LNAPL (when present) based on assumption of an LNAPL density of approximately 1.
- (3) NP - Not Present
- (4) NM - Not Measured
- (5) During the May 4, 2010 gauging, trace DNAPL was measured in DW-3R. After purging well, 0.33 feet of DNAPL was measured on May 5, 2010

FIGURE



LEGEND

-  NAPL COLLECTION TRENCH
-  CEMENT BENTONITE SLURRY WALL
-  APPROXIMATE LOCATION OF FOUNDATIONS OF FORMER STRUCTURES
-  ISS COLUMN
-  RECOVERY WELLS/PIEZOMETER - SEMI-ANNUAL WATER LEVEL AND NAPL GAUGING, 2010 TO 2012
-  SHALLOW BEDROCK MONITORING WELL - SEMI-ANNUAL WATER QUALITY SAMPLES, WATER LEVEL AND NAPL GAUGING, 2010 TO 2012
-  RECOVERY WELLS/SHALLOW MONITORING WELLS - NOT PART OF MONITORING PROGRAM



NOTES:

1. RW-1 THROUGH RW-20 ARE 8-INCH DIAMETER RECOVERY WELLS.
2. RW-21 AND RW-23 ARE 6-INCH DIAMETER RECOVERY WELLS.
3. THE TPMW AND SHALLOW BEDROCK MONITORING WELLS ARE 2-INCH DIAMETER WELLS.

FIGURE 1 ROCHESTER GAS & ELECTRIC CORPORATION	
WATER QUALITY, NAPL MONITORING AND NAPL RECOVERY WELLS	
EAST STATION FORMER MGP ROCHESTER, NY	
DATE: 4/16/10	FILE NAME: WATERQUAL
ISH INC.	