

Amen Omorogbe, P.E.  
 New York State Department of Environmental Conservation  
 Division of Environmental Remediation, Remedial Bureau C  
 625 Broadway, 11th Floor  
 Albany, New York 12233-7014

Subject:  
 Annual NAPL Monitoring Report – 2017  
 Passive Barrier Wall – Interim Remedial Measure  
 Binghamton Court Street, Former MGP  
 Site #7-04-031

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## ENVIRONMENT

Dear Mr. Omorogbe:

On behalf of NYSEG, Arcadis is pleased to present this report summarizing the monitoring data collected in accordance with the *NAPL Barrier Wall Interim Remedial Measure Engineering Certification Report* (Arcadis – Revised June 2008; referred to hereafter as the “Engineering Certification Report”). The purpose of the passive NAPL barrier is to prevent nonaqueous phase liquids (NAPLs) from leaving the site. The term “passive” refers to the fact that the barrier operates without the pumping or treating of groundwater. Construction of the passive NAPL barrier was substantially completed in November 2006; however, as discussed in the Engineering Certification Report, three NAPL-recovery wells (RW-20, RW-21, and RW-22) were not installed until January 2007. The formal monitoring program began in April 2007 following the installation of these wells.

### **Summary of Monitoring Program**

NAPL monitoring was conducted monthly in 2007 and 2008, but the frequency of monitoring was gradually reduced to the current annual monitoring frequency. Annual monitoring was discussed in the 2014 NAPL Monitoring Report and was initiated in December 2015. The monitoring program consists of obtaining measurements at the following wells:

- Twenty-two (22) NAPL-recovery wells located within the barrier wall (identified as RW-1 through RW-22 on the attached Figure 1).
- Replacement of monitoring well MW93-6D located in the northwest corner of the site (Figure 2).
- Twenty-eight (28) “sentinel” wells located within Court Street between the barrier and the Susquehanna River (MW97-7S, NMW-2, PZ01-02, PZ03-01D, PZ03-02A, PZ03-02D, PZ03-03A, PZ03-03B, PZ03-03D, PZ03-04A, PZ03-04B, PZ03-04D, PZ03-05A, PZ03-05B, PZ03-05C, PZ03-05D, PZ03-

Date:  
 April 9, 2018

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06A, PZ03-06B, PZ03-06C, PZ03-06D, PZ03-07A, PZ03-07B, PZ03-07C, PZ03-07D, PZ03-08A, PZ03-08B, PZ03-08C, and PZ03-08D). The locations of these wells are shown on Figure 2.

During the monitoring event, each location is monitored for depth to groundwater, depth to bottom, and, if present, the thickness of accumulated light NAPL (LNAPL) or dense NAPL (DNAPL). If present, LNAPL thickness is measured using an oil-water interface probe and confirmed using a clear bailer. DNAPL presence is monitored using a weighted measuring tape. If DNAPL is detected, the tape is also used to determine its thickness.

## 2017 Monitoring Results

The 2017 annual monitoring event was conducted on December 21, 2017. A historical summary of measurement data collected during the monitoring events is presented in Tables 1 and 2. To date, no measurable NAPL has accumulated in any of the barrier wall recovery wells. Only odors, sheens and trace amount of tar-like material have been observed.

Similar to previous monitoring events, LNAPL was detected in sentinel piezometer PZ01-02 (0.05 ft) located in Court Street, downgradient of the barrier wall. However, NAPL was not detected at any of the remaining sentinel piezometer location. As previously discussed, a zone of NAPL impacted soils near the water table was observed while installing this piezometers prior to the installation of the barrier wall. In addition, LNAPL has never been identified in any on-site monitoring wells (upgradient of the barrier wall). These facts, coupled with the continued absence of LNAPL in the barrier wall monitoring wells, indicate that the presence of LNAPL in these sentinel piezometers is not related to the performance of the barrier wall.

It should be noted that gauging was not conducted at the PZ03-06 (A, B, C, D) and PZ03-02 (A, D) piezometer clusters within Court Street because the locations have been paved over.

## MW93-6D

Monitoring well MW93-6D (Figure 2) is located upgradient of the barrier wall and was not originally included in the barrier wall monitoring program; however, an accumulation of DNAPL was observed in the well in July 2009 during an annual storm sewer inspection event, unrelated to the routine monitoring program. Since then, MW93-6D has been included in the regular monitoring program. Approximately 2 gallons of DNAPL have been removed from the well since initially observed in December 2011.

As agreed upon with the NYSDEC, well MW93-6D was decommissioned on December 22, 2011 to facilitate the installation of the new storm sewer. The storm sewer replacement was completed in March 2012 and a replacement well for MW93-6D was installed on July 25 and 26, 2012. Since the reinstallation, no measurable DNAPL has been observed in the well. Table 3 summarizes the monitoring data collected at MW93-6D.

## Path Forward

The draft *Site Management Plan* (draft SMP) for Operable Unit No. 1 (i.e., the upland portion of the site) was submitted to the NYSDEC in January 2016. As presented in the draft SMP, if NAPL is not observed in any wells during five consecutive monitoring events, NYSEG would request to terminate the NAPL monitoring program. The draft SMP also proposed that groundwater sampling be conducted annually for three years and then once every five years thereafter (if the dissolved phase plume is stable or shrinking). Note that NYSEG intends to conduct the first post-remediation groundwater sampling event in 2018.

Amen Omorogbe, P.E.  
New York State Department of Environmental Conservation  
April 9, 2018

Since initiating the barrier wall and sentinel (road) well monitoring program in 2007, NYSEG has completed 38 rounds of monitoring over the past 11 years. To date, no measurable amount of DNAPL has accumulated in any of the barrier wall recovery wells and only trace amounts of LNAPL have been observed in the sentinel wells. Based on these findings and the extensive amount of monitoring completed to date, in accordance with the draft SMP, NYSEG requests that the barrier wall (including well MW93-6D) monitoring frequency be reduced. As indicated above, groundwater sampling will be conducted annually for the next three years. NYSEG proposes that the next barrier wall NAPL monitoring event be conducted concurrent with the 2020 groundwater sampling event. Assuming NAPL is not observed during the 2020 event (and the dissolved phase plume is stable or shrinking), in accordance with the draft SMP, NAPL monitoring and groundwater sampling would be conducted every five years thereafter. Sampling/monitoring summary reports will be prepared each year that site activities are completed.

Additionally, NYSEG also proposes to discontinue monitoring of the sentinel wells within Court Street. Should measurable DNAPL or LNAPL begin to accumulate in the barrier wall recovery wells, NYSEG would consider increasing the frequency of the barrier wall monitoring and resume monitoring of the sentinel wells at a frequency agreed upon with NYSDEC.

Please feel free to contact Mr. Tracy Blazicek at 607.762.8839 or me at 315.671.9379 if you have any questions regarding the information contained in this report.

Sincerely,

Arcadis of New York, Inc.



David A. Cornell, P.G.  
Senior Geologist

Copies:

Tracy Blazicek, NYSEG  
Keith White, Arcadis

Enclosures:

### Tables

- 1 Barrier Wall Fluid-Level Monitoring
- 2 Offsite Fluid-Level Monitoring
- 3 DNAPL Monitoring Summary - MW93-06D

### Figures

- 1 NAPL Barrier Wall Location Map
- 2 "Sentinel" Well Monitoring Locations

### References

Arcadis BBL, 2007, Revised 2008. *NAPL Barrier Wall Interim Remedial Measure Engineering Certification Report*. Prepared for New York State Electric & Gas Corporation. March 2007.

Arcadis, 2016. *Draft Site Management Plan* (for Operable Unit No. 1). Prepared for New York State Electric & Gas Corporation. January 2016.

# TABLES



Table 1  
Barrier Wall Fluid-Level Monitoring

New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, New York

RECOVERY WELL RW-1													
Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			Comments/Observations
01/18/07	16:45	7.59	834.72	52.83	789.48	1.37	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
04/25/07	NR	7.22	835.09	52.50	789.81	1.70	--	--	--	--	--	--	Coal-tar-like odor.
05/30/07	NR	9.76	832.55	52.54	789.77	1.66	--	--	--	--	--	--	Trace yellow NAPL on top of probe, coal-tar-like odor.
06/27/07	8:48	10.73	831.58	52.85	789.46	1.35	--	--	--	--	--	--	Silt on the last 1" of probe.
07/24/07	10:01	10.41	831.90	52.60	789.71	1.60	--	--	--	--	--	--	Coal-tar-like odor.
08/28/07	10:00	10.87	831.44	52.71	789.60	1.49	--	--	--	--	--	--	Soft bottom, Silt on probe, VOC = 0.7ppm.
09/20/07	9:30	10.86	831.45	52.65	789.66	1.55	--	--	--	--	--	--	Able to penetrate sediment in well 0.25', coal-tar-like odor, coal-tar-like material on probe.
10/31/07	8:30	9.33	832.98	52.50	789.81	1.70	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor, VOCs = 0.0 ppm.
11/20/07	8:51	9.00	833.31	52.53	789.78	1.67	--	--	--	--	--	--	Coal-tar-like odor.
12/18/07	8:52	8.79	833.52	52.51	789.80	1.69	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	11:25	9.18	833.13	52.45	789.86	1.75	--	--	--	--	--	--	Soft bottom.
02/21/08	15:02	7.96	834.35	52.71	789.60	1.49	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
03/18/08	13:10	7.86	834.45	52.74	789.57	1.46	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
05/12/08	8:50	9.98	832.33	52.91	789.40	1.29	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
06/05/08	11:35	10.62	831.69	53.35	788.96	0.85	--	--	--	--	--	--	Trace sheen, soft bottom.
07/08/08	8:20	10.89	831.42	52.62	789.69	1.58	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
08/06/08	8:31	10.42	831.89	52.70	789.61	1.50	--	--	--	--	--	--	Soft bottom.
11/19/08	8:20	9.91	832.40	53.41	788.90	0.79	--	--	--	--	--	--	
02/06/09	8:53	10.36	831.95	52.69	789.62	1.51	--	--	--	--	--	--	
05/29/09	9:35	NR	NR	NR	NR	--	--	--	--	--	--	--	Did not take fluid level. Curb box lid fractured. Riser no longer plumb, leaning toward the west.
08/11/09	9:28	8.36	833.95	53.50	788.81	0.70	--	--	--	--	--	--	Very Soft bottom, slight odor.
11/09/09	11:01	9.39	832.92	53.65	788.66	0.55	--	--	--	--	--	--	Soft bottom.
02/23/10	8:35	10.10	832.21	53.50	788.81	0.70	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, 0.0 ppm.
05/28/10	11:08	10.24	832.07	52.98	789.33	1.22	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	9:18	9.89	832.42	52.30	790.01	1.90	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/23/10	10:39	9.17	833.14	52.20	790.11	2.00	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
02/28/11	8:55	8.54	833.77	52.90	789.41	1.30	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	10:34	8.68	833.63	52.12	790.19	2.08	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/26/11	8:45	10.34	831.97	52.20	790.11	2.00	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
02/15/12	12:03	9.89	832.42	53.55	788.76	0.65	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/15/12	11:15	10.01	832.30	53.55	788.76	0.65	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/19/12	11:15	9.97	832.34	53.32	788.99	0.88	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/26/13	11:02	10.22	832.09	51.11	791.20	3.09	--	--	--	--	--	--	Soft bottom.
05/16/14	8:10	9.37	832.94	51.37	790.94	2.83	--	--	--	--	--	--	Soft bottom.
12/01/14	13:03	9.81	832.50	51.40	790.91	2.80	--	--	--	--	--	--	Soft bottom.
12/17/15	10:37	10.13	832.18	51.14	791.17	3.06	--	--	--	--	--	--	Soft bottom.
12/27/16	10:54	9.42	832.89	53.48	788.83	0.72	--	--	--	--	--	--	Firm bottom.
12/21/17	8:20	10.41	831.90	51.41	790.90	2.79	--	--	--	--	--	--	Soft bottom.

Top of Casing (FAMSL) = 842.31  
Well bottom elev. (installed; FAMSL) = 788.11  
Installed Well Depth (ft) = 54.20

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.

FAMSL = Feet Above Mean Sea Level.  
TOC = Top of Casing.  
-- = NAPL not present.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-2					Comments/Observations	
							LNAPL			DNAPL			
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)								
01/18/07	17:05	8.10	834.02	49.53	792.59	2.77	--	--	--	--	--	Soft bottom.	
04/25/07	NR	7.40	834.72	49.15	792.97	3.15	--	--	--	--	--	Sheen on probe.	
05/30/07	NR	10.32	831.80	49.20	792.92	3.10	--	--	--	--	--	Trace Silt on probe.	
06/27/07	9:24	11.25	830.87	49.52	792.60	2.78	--	--	--	--	--	Black material on probe, tape and floating on the surface of the water.	
07/24/07	10:25	10.73	831.39	49.78	792.34	2.52	--	--	--	--	--	Able to penetrate sediment in well 0.15', faint organic-like odor.	
08/28/07	10:22	11.38	830.74	49.27	792.85	3.03	--	--	--	--	--	Soft bottom.	
09/20/07	9:50	11.42	830.70	49.04	793.08	3.26	--	--	--	--	--	Able to penetrate sediment in well 0.3', slight coal-tar-like odor.	
10/31/07	8:59	9.93	832.19	49.17	792.95	3.13	--	--	--	--	--	Able to penetrate sediment in well 0.2', strong coal-tar-like odor, manure-like odor, VOCs = 1.5 ppm.	
11/20/07	9:16	9.60	832.52	49.30	792.82	3.00	--	--	--	--	--	Mild coal-tar-like odor.	
12/18/07	9:25	9.42	832.70	49.10	793.02	3.20	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:19	9.69	832.43	49.28	792.84	3.02	--	--	--	--	--	Soft bottom.	
02/21/08	15:20	8.53	833.59	49.81	792.31	2.49	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
03/18/08	12:45	8.37	833.75	49.25	792.87	3.05	--	--	--	--	--	Soft bottom, sediment on probe. Vault lid will not close flush to the vault frame work, may be due to plowing or vehicles driving over the vault.	
05/12/08	8:40	10.45	831.67	49.57	792.55	2.73	--	--	--	--	--	Soft bottom, coal-tar-like odor, sediment on probe.	
06/05/08	11:58	11.19	830.93	52.27	789.85	0.03	--	--	--	--	--	Foam on the surface of the water. Well redeveloped on June 5th 2008.	
07/08/08	8:36	11.44	830.68	52.18	789.94	0.12	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
08/06/08	8:46	11.00	831.12	52.02	790.10	0.28	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
11/19/08	8:44	10.39	831.73	52.17	789.95	0.13	--	--	--	--	--	Firm bottom, steel casing has moved - well is no longer plumb.	
02/06/09	9:25	10.50	831.62	52.15	789.97	0.15	--	--	--	--	--		
05/29/09	11:48	9.49	832.63	52.15	789.97	0.15	--	--	--	--	--	Firm bottom, riser leaning toward the east.	
08/11/09	9:50	8.99	833.13	52.15	789.97	0.15	--	--	--	--	--	Firm bottom.	
11/09/09	11:18	9.98	832.14	52.22	789.90	0.08	--	--	--	--	--	Firm bottom.	
02/23/10	8:59	10.62	831.50	52.20	789.92	0.10	--	--	--	--	--	Firm bottom, 0.0 ppm.	
05/28/10	11:27	10.78	831.34	52.05	790.07	0.25	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	9:37	10.44	831.68	52.12	790.00	0.18	--	--	--	--	--	Dark gray sediment on probe, mild coal tar-like odor, 0.0 ppm.	
11/23/10	10:52	9.74	832.38	52.52	789.60	-0.22	--	--	--	--	--	Soft bottom.	
02/28/11	9:21	9.69	832.43	51.99	790.13	0.31	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	10:48	9.31	832.81	52.08	790.04	0.22	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:05	10.91	831.21	52.06	790.06	0.24	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	12:30	10.43	831.69	52.03	790.09	0.27	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	12:08	10.76	831.36	52.03	790.09	0.27	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	11:07	10.52	831.60	52.10	790.02	0.20	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	10:52	10.47	831.65	51.55	790.57	0.75	--	--	--	--	--	Soft bottom.	
05/16/14	8:21	9.57	832.55	51.67	790.45	0.63	--	--	--	--	--	Soft bottom.	
12/01/14	13:20	10.13	831.99	51.62	790.50	0.68	--	--	--	--	--	Soft bottom.	
12/17/15	10:34	10.39	831.73	51.70	790.42	0.60	--	--	--	--	--	Soft bottom.	
12/27/16	11:00	10.51	831.61	51.70	790.42	0.60	--	--	--	--	--	Firm bottom.	
12/21/17	8:54	10.67	831.45	51.71	790.41	0.59	--	--	--	--	--	Firm bottom.	

Top of Casing (FAMSL) = 842.12  
Well bottom elev. (installed; FAMSL) = 789.82  
Installed Well Depth (ft) = 52.30

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.
  5. Well redeveloped on June 5th 2008.
- FAMSL = Feet Above Mean Sea Level.  
TOC = Top of Casing.  
-- = NAPL not present.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-3					Comments/Observations	
							LNAPL			DNAPL			
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)								
01/18/07	16:55	8.13	833.70	16.31	825.52	0.44	--	--	--	--	--	Soft bottom.	
04/25/07	NR	7.90	833.93	16.50	825.33	0.25	--	--	--	--	--		
05/30/07	NR	10.33	831.50	16.39	825.44	0.36	--	--	--	--	--	Firm bottom, little dark gray sediment on probe.	
06/27/07	9:30	11.26	830.57	16.15	825.68	0.60	--	--	--	--	--	Silt on the last 4" of probe.	
07/24/07	10:28	10.72	831.11	16.70	825.13	0.05	--	--	--	--	--	Able to penetrate sediment in well 0.5', faint organic-like odor.	
08/28/07	10:22	11.38	830.45	16.20	825.63	0.55	--	--	--	--	--	Soft bottom.	
09/20/07	9:54	11.42	830.41	16.25	825.58	0.50	--	--	--	--	--	Able to penetrate sediment in well 0.2', slight coal-tar-like odor.	
10/31/07	9:03	9.92	831.91	16.48	825.35	0.27	--	--	--	--	--	Able to penetrate sediment in well 0.2', slight coal-tar-like odor, manure-like odor, VOCs = 4.7 ppm.	
11/20/07	9:23	9.59	832.24	16.26	825.57	0.49	--	--	--	--	--	Mild coal-tar-like odor.	
12/18/07	9:29	9.43	832.40	16.25	825.58	0.50	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:18	9.66	832.17	16.17	825.66	0.58	--	--	--	--	--		
02/21/08	15:25	8.51	833.32	16.59	825.24	0.16	--	--	--	--	--	Soft bottom.	
03/18/08	12:48	8.35	833.48	16.49	825.34	0.26	--	--	--	--	--	Soft bottom, coal-tar-like odor. Vault lid will not close flush to the vault frame work, may be due to plowing or vehicles driving over the vault.	
05/12/08	8:41	10.45	831.38	16.59	825.24	0.16	--	--	--	--	--	Soft bottom, sediment on probe.	
06/05/08	11:59	11.16	830.67	16.65	825.18	0.10	--	--	--	--	--	Approximately 0.25' of gray sediment in well.	
07/08/08	8:40	11.44	830.39	16.51	825.32	0.24	--	--	--	--	--	Firm bottom.	
08/06/08	8:47	10.99	830.84	16.29	825.54	0.46	--	--	--	--	--	Coal-tar-like odor.	
11/19/08	8:45	10.45	831.38	16.73	825.10	0.02	--	--	--	--	--	Firm bottom, steel casing has moved - wells no longer plumb.	
02/06/09	9:27	10.84	830.99	16.61	825.22	0.14	--	--	--	--	--		
05/29/09	11:50	9.49	832.34	16.61	825.22	0.14	--	--	--	--	--	Firm bottom, riser leaning slightly.	
08/11/09	9:56	8.99	832.84	16.40	825.43	0.35	--	--	--	--	--	Very soft, slight odor, 3.5" of dark gray sediment on probe.	
11/09/09	11:18	9.98	831.85	16.70	825.13	0.05	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
02/23/10	9:07	10.63	831.20	16.60	825.23	0.15	--	--	--	--	--	Firm bottom, 0.0 ppm.	
05/28/10	11:29	10.78	831.05	16.30	825.53	0.45	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	9:41	10.45	831.38	16.22	825.61	0.53	--	--	--	--	--	Gray sediment on probe, coal tar-like odor, 0.0 ppm.	
11/23/10	10:53	9.74	832.09	16.40	825.43	0.35	--	--	--	--	--	Soft bottom.	
02/28/11	9:24	9.66	832.17	16.17	825.66	0.58	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	10:50	9.31	832.52	16.43	825.40	0.32	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/26/11	9:06	10.91	830.92	16.32	825.51	0.43	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	12:33	10.47	831.36	16.51	825.32	0.24	--	--	--	--	--	Firm bottom, 0.0 ppm; coal tar-like odor.	
06/15/12	12:07	10.55	831.28	16.31	825.52	0.44	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	11:05	10.54	831.29	16.63	825.20	0.12	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	10:51	10.51	831.32	15.87	825.96	0.88	--	--	--	--	--	Soft bottom.	
05/16/14	8:24	9.60	832.23	15.88	825.95	0.87	--	--	--	--	--	Soft bottom.	
12/01/14	13:23	10.13	831.70	15.88	825.95	0.87	--	--	--	--	--	Soft bottom.	
12/17/15	10:33	10.39	831.44	15.94	825.89	0.81	--	--	--	--	--	Soft bottom.	
12/27/16	11:02	10.51	831.32	15.94	825.89	0.81	--	--	--	--	--	Firm bottom.	
12/21/17	8:53	10.69	831.14	16.17	825.66	0.58	--	--	--	--	--	Soft bottom.	

Top of Casing (FAMSL) = 841.83  
Well bottom elev. (installed; FAMSL) = 825.08  
Installed Well Depth (ft) = 16.75

**Notes:**

- Elevations referenced to the NAVD 88 Datum.
- Surface elevation = the elevation of the vault lid or curb box lid.
- Used weighted measuring tape for depth to bottom starting on 7/24/07.
- Well bottom elevations are approximate.

FAMSL = Feet Above Mean Sea Level.  
TOC = Top of Casing.  
-- = NAPL not present.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-4								Comments/Observations		
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL		DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	
01/18/07	16:15	8.72	833.79	15.61	826.90	1.49	--	--	--	--	--	Soft bottom.
04/25/07	NR	5.92	836.59	15.75	826.76	1.35	--	--	--	--	--	
05/30/07	NR	11.03	831.48	15.90	826.61	1.20	--	--	--	--	--	Soft bottom, little Silt on probe.
06/27/07	9:35	11.96	830.55	15.89	826.62	1.21	--	--	--	--	--	Mild coal-tar-like odor, black material on probe.
07/24/07	10:37	11.42	831.09	15.76	826.75	1.34	--	--	--	--	--	Hard bottom, organic-like odor.
08/28/07	10:33	12.11	830.40	15.75	826.76	1.35	--	--	--	--	--	Mild manure-like odor.
09/20/07	9:58	12.14	830.37	15.76	826.75	1.34	--	--	--	--	--	Firm bottom, slight coal-tar-like odor, manure-like odor.
10/31/07	9:10	10.65	831.86	15.72	826.79	1.38	--	--	--	--	--	Firm bottom, slight coal-tar-like odor, manure-like odor, VOCs = 0.9 ppm.
11/20/07	9:31	10.32	832.19	15.79	826.72	1.31	--	--	--	--	--	Firm bottom.
12/18/07	9:39	10.14	832.37	15.80	826.71	1.30	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	11:12	10.38	832.13	15.69	826.82	1.41	--	--	--	--	--	Soft bottom.
02/21/08	13:30	9.08	833.43	15.88	826.63	1.22	--	--	--	--	--	Firm bottom, coal-tar-like odor, manure-like odor.
03/18/08	12:43	9.07	833.44	15.96	826.55	1.14	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.
05/12/08	8:37	11.17	831.34	15.99	826.52	1.11	--	--	--	--	--	Firm bottom.
06/05/08	12:12	11.88	830.63	16.02	826.49	1.08	--	--	--	--	--	
07/08/08	8:45	12.16	830.35	15.91	826.60	1.19	--	--	--	--	--	Firm bottom.
08/06/08	8:50	11.70	830.81	15.90	826.61	1.20	--	--	--	--	--	Firm bottom.
11/19/08	8:50	11.19	831.32	15.99	826.52	1.11	--	--	--	--	--	Hard bottom.
02/06/09	9:43	11.57	830.94	15.82	826.69	1.28	--	--	--	--	--	
05/29/09	11:53	10.22	832.29	15.95	826.56	1.15	--	--	--	--	--	Hard bottom, riser leaning to the south.
08/11/09	10:00	9.74	832.77	15.90	826.61	1.20	--	--	--	--	--	Firm bottom, slight odor.
11/09/09	11:25	10.71	831.80	15.90	826.61	1.20	--	--	--	--	--	Firm bottom.
02/23/10	9:12	11.37	831.14	15.90	826.61	1.20	--	--	--	--	--	Firm bottom, 0.0 ppm.
05/28/10	11:30	11.51	831.00	15.85	826.66	1.25	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	9:53	11.12	831.39	15.82	826.69	1.28	--	--	--	--	--	Sediment on probe, 0.0 ppm.
11/23/10	10:57	10.47	832.04	15.90	826.61	1.20	--	--	--	--	--	Firm bottom.
02/28/11	10:25	10.35	832.16	15.72	826.79	1.38	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	10:52	10.01	832.50	15.82	826.69	1.28	--	--	--	--	--	Firm bottom, 0.0 ppm.
08/26/11	9:08	11.61	830.90	15.80	826.71	1.30	--	--	--	--	--	Firm bottom, 0.0 ppm.
02/15/12	12:45	11.15	831.36	15.85	826.66	1.25	--	--	--	--	--	Firm bottom, coal tar-like odor, 0.0 ppm.
06/15/12	12:05	11.45	831.06	15.85	826.66	1.25	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	10:43	11.21	831.30	15.80	826.71	1.30	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	11:10	11.53	830.98	15.75	826.76	1.35	--	--	--	--	--	Firm bottom.
05/16/14	8:30	10.59	831.92	15.88	826.63	1.22	--	--	--	--	--	Firm bottom.
12/01/14	13:25	11.13	831.38	15.86	826.65	1.24	--	--	--	--	--	Firm bottom.
12/17/15	10:30	11.40	831.11	15.73	826.78	1.37	--	--	--	--	--	Firm bottom.
12/27/16	11:06	10.75	831.76	15.84	826.67	1.26	--	--	--	--	--	Firm bottom.
12/21/17	8:57	11.71	830.80	15.85	826.66	1.25	--	--	--	--	--	Hard bottom.

Top of Casing (FAMSL) = 842.51  
 Well bottom elev. (installed; FAMSL) = 825.41  
 Installed Well Depth (ft) = 17.10

- Notes:**
1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.

FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-5					Comments/Observations	
							LNAPL			DNAPL			
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)								
01/18/07	16:19	8.76	833.72	39.95	802.53	8.65	--	--	--	--	--	Soft bottom.	
04/25/07	NR	5.58	836.90	40.10	802.38	8.50	--	--	--	--	--	Coal-tar-like odor.	
05/30/07	NR	10.99	831.49	40.10	802.38	8.50	--	--	--	--	--	Soft bottom, trace Silt on probe, slight coal-tar-like odor.	
06/27/07	9:41	11.94	830.54	40.22	802.26	8.38	--	--	--	--	--	Coal-tar-like odor, manure-like odor, Silt on the last 2" of probe.	
07/24/07	10:40	11.41	831.07	40.07	802.41	8.53	--	--	--	--	--	Able to penetrate sediment in well 0.8'.	
08/28/07	10:35	12.07	830.41	40.25	802.23	8.35	--	--	--	--	--	Silt on end of probe, manure-like odor.	
09/20/07	10:04	12.09	830.39	40.11	802.37	8.49	--	--	--	--	--	Able to penetrate sediment in well 0.11', coal-tar-like odor, manure-like odor.	
10/31/07	9:13	10.62	831.86	40.25	802.23	8.35	--	--	--	--	--	Able to penetrate sediment in well 0.2', manure-like odor, VOCs = 2.0 ppm.	
11/20/07	9:39	10.28	832.20	40.09	802.39	8.51	--	--	--	--	--	Mild coal-tar-like odor.	
12/18/07	9:43	10.11	832.37	40.17	802.31	8.43	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:10	10.34	832.14	40.04	802.44	8.56	--	--	--	--	--	Soft bottom.	
02/21/08	13:41	9.11	833.37	40.90	801.58	7.70	--	--	--	--	--	Soft bottom, manure-like odor.	
03/18/08	12:40	9.05	833.43	40.90	801.58	7.70	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
05/12/08	8:38	11.18	831.30	42.89	799.59	5.71	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
06/05/08	12:13	11.83	830.65	48.60	793.88	0.00	--	--	--	--	--	Well redeveloped on June 5th 2008.	
07/08/08	8:46	12.11	830.37	48.59	793.89	0.01	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
08/06/08	8:52	11.69	830.79	48.60	793.88	0.00	--	--	--	--	--	Coal-tar-like odor.	
11/19/08	8:51	11.08	831.40	48.56	793.92	0.04	--	--	--	--	--	Firm bottom.	
02/06/09	9:45	11.60	830.88	48.68	793.80	-0.08	--	--	--	--	--		
05/29/09	11:55	10.19	832.29	48.59	793.89	0.01	--	--	--	--	--	Hard bottom.	
08/11/09	10:05	9.71	832.77	48.55	793.93	0.05	--	--	--	--	--	Firm bottom.	
11/09/09	11:26	10.67	831.81	48.61	793.87	-0.01	--	--	--	--	--	Firm bottom.	
02/23/10	9:14	11.32	831.16	48.60	793.88	0.00	--	--	--	--	--	Firm bottom, 0.0 ppm.	
05/28/10	11:32	11.49	830.99	48.67	793.81	-0.07	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	9:51	11.18	831.30	48.57	793.91	0.03	--	--	--	--	--	Sediment on probe, 0.0 ppm.	
11/23/10	10:58	10.45	832.03	NR	-	-	--	--	--	--	--	Firm bottom.	
02/28/11	10:28	10.37	832.11	48.50	793.98	0.10	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	10:54	10.01	832.47	48.53	793.95	0.07	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:09	11.61	830.87	48.55	793.93	0.05	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	12:48	11.10	831.38	48.54	793.94	0.06	--	--	--	--	--	Firm bottom, 0.0 ppm; coal tar-like odor.	
06/15/12	12:05	11.45	831.03	48.54	793.94	0.06	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	10:40	11.21	831.27	48.55	793.93	0.05	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:11	11.49	830.99	48.62	793.86	-0.02	--	--	--	--	--	Firm bottom.	
05/16/14	8:35	10.60	831.88	48.59	793.89	0.01	--	--	--	--	--	sheen; firm bottom.	
12/01/14	13:28	11.13	831.35	48.65	793.83	-0.05	--	--	--	--	--	Firm bottom.	
12/17/15	10:28	11.35	831.13	48.46	794.02	0.14	--	--	--	--	--	Firm bottom.	
12/27/16	11:05	10.40	832.08	48.50	793.98	0.10	--	--	--	--	--	Firm bottom.	
12/21/17	8:58	11.68	830.80	48.57	793.91	0.03	--	--	--	--	--	Firm bottom, faint coal tar-like odor.	

Top of Casing (FAMSL) = 842.48  
 Well bottom elev. (installed; FAMSL) = 793.88  
 Installed Well Depth (ft) = 48.60

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.
5. Well redeveloped on June 5th 2008.

FAMSL = Feet Above Mean Sea Level.

TOC = Top of Casing.

-- = NAPL not present.

NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-6						Comments/Observations	
							LNAPL			DNAPL				
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)									
01/18/07	16:05	9.52	834.05	32.90	810.67	16.20	--	--	--	--	--	--	Soft bottom.	
04/25/07	NR	9.12	834.45	32.80	810.77	16.30	--	--	--	--	--	--	Silty bottom, coal-tar-like odor, sheen on probe.	
05/30/07	NR	11.54	832.03	32.90	810.67	16.20	--	--	--	--	--	--	Very soft bottom, Silt on the end of probe, strong coal-tar-like odor.	
06/27/07	9:52	12.32	831.25	32.95	810.62	16.15	--	--	--	--	--	--	Coal-tar-like odor, Silt on the last 3" of probe, black material on the end of the probe and on the water surface.	
07/24/07	10:44	12.09	831.48	33.13	810.44	15.97	--	--	--	--	--	--	Trace sheen on sediment on probe, strong organic-like odor and manure-like odor, able to penetrate sediment in well 0.1', black material on probe.	
08/28/07	10:39	12.50	831.07	32.95	810.62	16.15	--	--	--	--	--	--	Soft bottom, Silt on end of probe, manure-like odor.	
09/20/07	10:09	12.87	830.70	32.95	810.62	16.15	--	--	--	--	--	--	Able to penetrate sediment in well 0.2', brown material at the water surface, manure-like odor.	
10/31/07	9:19	11.20	832.37	32.98	810.59	16.12	--	--	--	--	--	--	Able to penetrate sediment in well 0.2', film on water surface, brown slimy material on the probe (from the surface of the water), coal-tar-like and manure-like odors, VOCs = 1.3 ppm.	
11/20/07	9:46	10.92	832.65	33.05	810.52	16.05	--	--	--	--	--	--	Manure-like odor.	
12/18/07	9:49	10.71	832.86	33.20	810.37	15.90	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:09	10.92	832.65	33.00	810.57	16.10	--	--	--	--	--	--		
02/21/08	13:57	9.72	833.85	32.96	810.61	16.14	--	--	--	--	--	--	Soft bottom, strong coal-tar-like odor, manure-like odor, sheen on water surface, sheen on sediment on probe.	
03/18/08	12:36	9.46	834.11	32.85	810.72	16.25	--	--	--	--	--	--	Soft bottom, trace sheen on sediment on probe, no odor.	
05/12/08	8:34	11.55	832.02	35.69	807.88	13.41	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
06/05/08	14:15	11.68	831.89	48.75	794.82	0.35	--	--	--	--	--	--	Well redeveloped on June 5th 2008.	
07/08/08	8:48	12.57	831.00	48.50	795.07	0.60	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
08/06/08	8:58	12.12	831.45	48.42	795.15	0.68	--	--	--	--	--	--	Firm bottom.	
11/19/08	8:54	11.68	831.89	48.44	795.13	0.66	--	--	--	--	--	--	Firm bottom.	
02/06/09	10:12	11.98	831.59	48.60	794.97	0.50	--	--	--	--	--	--	Firm bottom.	
05/29/09	12:05	10.92	832.65	48.42	795.15	0.68	--	--	--	--	--	--	Hard bottom.	
08/11/09	10:07	10.52	833.05	48.50	795.07	0.60	--	--	--	--	--	--	Firm bottom.	
11/09/09	11:31	11.22	832.35	48.52	795.05	0.58	--	--	--	--	--	--	Firm bottom.	
02/23/10	9:25	11.91	831.66	48.52	795.05	0.58	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
05/28/10	11:34	11.92	831.65	48.62	794.95	0.48	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:05	11.74	831.83	48.40	795.17	0.70	--	--	--	--	--	--	0.0 ppm.	
11/23/10	10:59	11.06	832.51	48.50	795.07	0.60	--	--	--	--	--	--	Soft bottom.	
02/28/11	10:33	11.04	832.53	48.42	795.15	0.68	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	10:56	10.33	833.24	48.49	795.08	0.61	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:10	12.04	831.53	48.43	795.14	0.67	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	12:51	11.56	832.01	48.38	795.19	0.72	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	12:02	11.81	831.76	48.38	795.19	0.72	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	10:50	11.78	831.79	48.46	795.11	0.64	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:13	12.05	831.52	48.65	794.92	0.45	--	--	--	--	--	--	Soft bottom.	
05/16/14	8:40	11.11	832.46	48.57	795.00	0.53	--	--	--	--	--	--	Sheen.	
12/01/14	13:32	11.78	831.79	48.45	795.12	0.65	--	--	--	--	--	--	Soft bottom.	
12/17/15	10:26	12.05	831.52	48.33	795.24	0.77	--	--	--	--	--	--	Firm bottom.	
12/27/16	11:10	11.25	832.32	48.40	795.17	0.70	--	--	--	--	--	--	Firm bottom.	
12/21/17	9:03	12.18	831.39	48.48	795.09	0.62	--	--	--	--	--	--	Hard bottom, mild coal tar-like odor, 0.2' brown NAPL staining and blebs on bottom of probe.	

Top of Casing (FAMSL) = 843.57  
Well bottom elev. (installed; FAMSL) = 794.47  
Installed Well Depth (ft) = 49.10

- Notes:**
1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.
  5. Well redeveloped on June 5th 2008.
- FAMSL = Feet Above Mean Sea Level.  
TOC = Top of Casing.  
-- = NAPL not present.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-7						Comments/Observations
							LNAPL			DNAPL			
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)								
01/18/07	16:08	9.58	834.00	18.75	824.83	0.04	--	--	--	--	--	--	Firm bottom.
04/25/07	NR	9.23	834.35	18.79	824.79	0.00	--	--	--	--	--	--	Coal-tar-like odor.
05/30/07	NR	11.55	832.03	18.87	824.71	-0.08	--	--	--	--	--	--	Trace Silt on probe.
06/27/07	9:57	12.40	831.18	18.85	824.73	-0.06	--	--	--	--	--	--	Mild coal-tar-like odor, black material on probe and on water surface.
07/24/07	10:49	12.04	831.54	18.72	824.86	0.07	--	--	--	--	--	--	Strong manure-like odor, firm bottom, trace sheen on sediment on probe.
08/28/07	10:43	12.59	830.99	18.78	824.80	0.01	--	--	--	--	--	--	Firm bottom, Silt on end of probe.
09/20/07	10:13	12.66	830.92	18.60	824.98	0.19	--	--	--	--	--	--	Firm bottom, trace sediment on probe, manure-like odor.
10/31/07	9:23	11.31	832.27	18.73	824.85	0.06	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, manure-like odor, VOCs = 6.3 ppm.
11/20/07	9:52	11.01	832.57	18.83	824.75	-0.04	--	--	--	--	--	--	Coal-tar-like odor, manure-like odor, sediment on probe.
12/18/07	9:53	10.76	832.82	18.95	824.63	-0.16	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	11:07	10.90	832.68	18.66	824.92	0.13	--	--	--	--	--	--	Soft bottom.
02/21/08	13:59	9.78	833.80	18.73	824.85	0.06	--	--	--	--	--	--	Firm bottom, coal-tar-like odor, manure-like odor.
03/18/08	12:34	9.55	834.03	18.80	824.78	-0.01	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, sediment on probe.
05/12/08	8:33	11.62	831.96	12.77	830.81	6.02	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.
06/05/08	14:17	11.34	832.24	18.74	824.84	0.05	--	--	--	--	--	--	--
07/08/08	8:49	12.62	830.96	18.73	824.85	0.06	--	--	--	--	--	--	Firm bottom, sediment on probe.
08/06/08	9:01	12.16	831.42	18.70	824.88	0.09	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.
11/19/08	8:55	11.77	831.81	18.75	824.83	0.04	--	--	--	--	--	--	Firm bottom.
02/06/09	10:15	12.02	831.56	18.70	824.88	0.09	--	--	--	--	--	--	--
05/29/09	12:07	10.92	832.66	18.77	824.81	0.02	--	--	--	--	--	--	Hard bottom.
08/11/09	10:09	10.57	833.01	18.72	824.86	0.07	--	--	--	--	--	--	Firm bottom, odor.
11/09/09	11:32	11.24	832.34	18.75	824.83	0.04	--	--	--	--	--	--	Firm bottom.
02/23/10	9:29	11.89	831.69	18.75	824.83	0.04	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
05/28/10	11:36	11.94	831.64	18.66	824.92	0.13	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	10:02	11.80	831.78	18.70	824.88	0.09	--	--	--	--	--	--	Sediment on probe, mild coal tar-like odor, 0.0 ppm.
11/23/10	11:00	11.05	832.53	18.65	824.93	0.14	--	--	--	--	--	--	Sediment on probe, mild coal tar-like odor, 0.0 ppm.
02/28/11	10:36	11.04	832.54	18.70	824.88	0.09	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	10:58	10.32	833.26	18.72	824.86	0.07	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
08/26/11	9:11	12.06	831.52	18.69	824.89	0.10	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
02/15/12	12:56	11.59	831.99	18.67	824.91	0.12	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
06/15/12	12:01	11.77	831.81	18.67	824.91	0.12	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	10:45	11.77	831.81	18.71	824.87	0.08	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	11:14	12.06	831.52	18.70	824.88	0.09	--	--	--	--	--	--	Firm bottom.
05/16/14	8:45	11.15	832.43	18.68	824.9	0.11	--	--	--	--	--	--	Firm bottom.
12/01/14	13:35	11.78	831.80	18.72	824.86	0.07	--	--	--	--	--	--	Firm bottom.
12/17/15	10:24	12.01	831.57	18.63	824.95	0.16	--	--	--	--	--	--	Firm bottom.
12/27/16	11:15	11.30	832.28	18.69	824.89	0.10	--	--	--	--	--	--	Firm bottom.
12/21/17	9:04	12.22	831.36	18.72	824.86	0.07	--	--	--	--	--	--	Firm bottom.

Top of Casing (FAMSL) = 843.58  
 Well bottom elev. (installed; FAMSL) = 824.79  
 Installed Well Depth (ft) = 18.79

**Notes:**

- Elevations referenced to the NAVD 88 Datum.
- Surface elevation = the elevation of the vault lid or curb box lid.
- Used weighted measuring tape for depth to bottom starting on 7/24/07.
- Well bottom elevation is based on averaged measured well depth over time.  
 The well bottom elevation was changed on 12/29/08 because sediment thickness values, using well bottom elevation from probing event on 1/13/08, were indicating negative sediment.

FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-8						Comments/Observations	
							LNAPL			DNAPL				
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)									
01/18/07	13:00	9.58	833.47	14.09	828.96	4.01	--	--	--	--	--	--	Soft bottom.	
04/25/07	NR	9.20	833.85	14.10	828.95	4.00	--	--	--	--	--	--	Very Silty, Silt on probe, trace sheen on sediment on probe.	
05/30/07	NR	11.48	831.57	14.02	829.03	4.08	--	--	--	--	--	--	Silt on 2" of end of probe.	
06/27/07	10:05	12.32	830.73	14.05	829.00	4.05	--	--	--	--	--	--	Coal-tar-like odor, Silt on the last 4" of probe, black material on probe and tape.	
07/24/07	10:53	11.99	831.06	14.68	828.37	3.42	--	--	--	--	--	--	Able to penetrate sediment in well 0.9", trace coal-tar-like blebs and sheen in sediment, strong manure-like odor.	
08/28/07	10:53	12.50	830.55	14.04	829.01	4.06	--	--	--	--	--	--	Soft bottom, approximately 3" of Silt on end of probe, mild manure-like odor.	
09/20/07	10:26	12.58	830.47	13.90	829.15	4.20	--	--	--	--	--	--	Firm bottom, slight coal-tar-like odor.	
10/31/07	9:34	11.31	831.74	14.39	828.66	3.71	--	--	--	--	--	--	Able to penetrate sediment in well 0.6", coal-tar-like odor, VOCs = 1.5 ppm. Vault lid is not closing flush to the surrounding vault frame work.	
11/20/07	10:01	11.03	832.02	13.97	829.08	4.13	--	--	--	--	--	--	Manure-like odor, sediment on probe, slight coal-tar-like odor.	
12/18/07	10:04	10.76	832.29	14.15	828.90	3.95	--	--	--	--	--	--	Able to penetrate sediment in well 0.1", coal-tar-like odor.	
01/31/08	11:06	10.82	832.23	13.87	829.18	4.23	--	--	--	--	--	--	Soft bottom.	
02/21/08	14:11	9.76	833.29	14.21	828.84	3.89	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
03/18/08	11:51	9.49	833.56	14.61	828.44	3.49	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, trace brown/black oily coal-tar-like material on sediment on probe, sheen on sediment on probe.	
05/12/08	8:28	11.50	831.55	14.84	828.21	3.26	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
06/05/08	12:46	12.10	830.95	18.03	825.02	0.07	--	--	--	--	--	--	Well redeveloped on June 5th 2008.	
07/08/08	8:55	12.51	830.54	18.07	824.98	0.03	--	--	--	--	--	--	Firm bottom.	
08/06/08	9:09	12.07	830.98	18.02	825.03	0.08	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.	
11/19/08	8:59	11.69	831.36	18.04	825.01	0.06	--	--	--	--	--	--	Firm bottom.	
02/06/09	10:38	11.79	831.26	18.09	824.96	0.01	--	--	--	--	--	--		
05/29/09	12:13	10.93	832.12	18.05	825.00	0.05	--	--	--	--	--	--	Hard bottom, vault has rotated. NYSEG storing high tension power line poles around vault and may have disturbed the vault when bringing in the poles.	
08/11/09	10:17	10.65	832.40	18.00	825.05	0.10	--	--	--	--	--	--	Firm bottom.	
11/09/09	11:39	11.21	831.84	18.00	825.05	0.10	--	--	--	--	--	--	Hard bottom.	
02/23/10	9:36	11.78	831.27	18.05	825.00	0.05	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
05/28/10	11:42	11.85	831.20	18.00	825.05	0.10	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:18	11.73	831.32	18.05	825.00	0.05	--	--	--	--	--	--	0.0 ppm.	
11/23/10	11:05	11.04	832.01	18.00	825.05	0.10	--	--	--	--	--	--	Firm bottom.	
02/28/11	10:41	10.95	832.10	17.70	825.35	0.40	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:05	10.16	832.89	17.92	825.13	0.18	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:17	12.01	831.04	17.93	825.12	0.17	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	13:13	11.53	831.52	17.92	825.13	0.18	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	11:58	11.85	831.20	17.89	825.16	0.21	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	10:40	11.64	831.41	18.00	825.05	0.10	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:19	11.92	831.13	17.90	825.15	0.20	--	--	--	--	--	--	Firm bottom.	
05/16/14	8:50	11.02	832.03	17.89	825.16	0.21	--	--	--	--	--	--	MGP odor; firm bottom.	
12/01/14	13:37	11.72	831.33	17.95	825.10	0.15	--	--	--	--	--	--	Firm bottom.	
12/17/15	10:20	11.97	831.08	17.72	825.33	0.38	--	--	--	--	--	--	Firm bottom.	
12/27/16	11:20	11.24	831.81	17.98	825.07	0.12	--	--	--	--	--	--	Firm bottom.	
12/21/17	11:49	12.12	830.93	18.00	825.05	0.10	--	--	--	--	--	--	Soft bottom, trace sediment on bottom of probe.	

Top of Casing (FAMSL) = 843.05  
 Well bottom elev. (installed; FAMSL) = 824.95  
 Installed Well Depth (ft) = 18.10

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.
5. Well redeveloped on June 5th 2008.

FAMSL = Feet Above Mean Sea Level.

TOC = Top of Casing.

-- = NAPL not present.

NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-9						Comments/Observations	
							LNAPL			DNAPL				
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)									
01/18/07	13:10	9.59	833.93	52.93	790.59	0.02	--	--	--	--	--	--	Firm bottom.	
04/25/07	NR	9.20	834.32	53.10	790.42	-0.15	--	--	--	--	--	--		
05/30/07	NR	11.44	832.08	53.25	790.27	-0.30	--	--	--	--	--	--	Trace Silt on probe.	
06/27/07	10:11	12.32	831.20	53.05	790.47	-0.10	--	--	--	--	--	--	Mild coal-tar-like odor.	
07/24/07	10:58	12.00	831.52	52.92	790.60	0.03	--	--	--	--	--	--	Able to penetrate sediment in well 0.1'.	
08/28/07	10:49	12.51	831.01	53.05	790.47	-0.10	--	--	--	--	--	--	Trace black material on end of probe, mild manure-like odor.	
09/20/07	10:20	12.59	830.93	52.91	790.61	0.04	--	--	--	--	--	--	Bubbles on surface of water, able to penetrate sediment in well 0.1', other wise firm bottom.	
10/31/07	9:31	11.33	832.19	52.90	790.62	0.05	--	--	--	--	--	--	Soft bottom, mild coal-tar-like odor, thin film on water surface, VOCs = 7.4 ppm. Vault lid is not closing flush to surrounding vault frame work.	
11/20/07	10:08	11.03	832.49	53.31	790.21	-0.36	--	--	--	--	--	--	Manure-like odor.	
12/18/07	9.59	10.77	832.75	53.30	790.22	-0.35	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:05	10.81	832.71	52.85	790.67	0.10	--	--	--	--	--	--	Soft bottom.	
02/21/08	14:12	9.75	833.77	52.93	790.59	0.02	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
03/18/08	11:54	9.48	834.04	52.97	790.55	-0.02	--	--	--	--	--	--	Soft bottom.	
05/12/08	8:28	11.49	832.03	53.01	790.51	-0.06	--	--	--	--	--	--	Soft bottom.	
06/05/08	12:45	12.10	831.42	52.92	790.60	0.03	--	--	--	--	--	--		
07/08/08	8:54	12.50	831.02	52.92	790.60	0.03	--	--	--	--	--	--	Soft bottom, mild coal-tar-like odor.	
08/06/08	9:06	12.07	831.45	52.92	790.60	0.03	--	--	--	--	--	--	Soft bottom, mild coal-tar-like odor.	
11/19/08	8:58	11.73	831.79	52.96	790.56	-0.01	--	--	--	--	--	--	Firm bottom.	
02/06/09	10:43	11.91	831.61	52.91	790.61	0.04	--	--	--	--	--	--	Firm bottom.	
05/29/09	12:11	10.97	832.55	52.92	790.60	0.03	--	--	--	--	--	--	Firm bottom, vault has rotated. NYSEG storing high tension power line poles around vault and may have disturbed the vault when bringing in the poles.	
08/11/09	10:18	10.66	832.86	52.92	790.60	0.03	--	--	--	--	--	--	Soft bottom.	
11/09/09	11:38	11.21	832.31	52.94	790.58	0.01	--	--	--	--	--	--	Firm bottom.	
02/23/10	9:39	11.81	831.71	52.91	790.61	0.04	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
05/28/10	11:40	11.87	831.65	52.90	790.62	0.05	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:12	11.73	831.79	52.95	790.57	0.00	--	--	--	--	--	--	Cow manure-like odor, 0.0 ppm.	
11/23/10	11:06	11.01	832.51	53.03	790.49	-0.08	--	--	--	--	--	--	Soft bottom.	
02/28/11	10:53	10.59	832.93	52.94	790.58	0.01	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:07	10.19	833.33	52.94	790.58	0.01	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:16	12.01	831.51	52.92	790.60	0.03	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	13:10	11.53	831.99	52.92	790.60	0.03	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	11:57	11.73	831.79	52.90	790.62	0.05	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	10:37	11.69	831.83	52.95	790.57	0.00	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:18	11.99	831.53	52.45	791.07	0.50	--	--	--	--	--	--	Soft bottom.	
05/16/14	8:55	11.08	832.44	52.29	791.23	0.66	--	--	--	--	--	--	Soft bottom.	
12/01/14	13:40	11.74	831.78	52.30	791.22	0.65	--	--	--	--	--	--	Soft bottom.	
12/17/15	10:22	11.98	831.54	52.22	791.30	0.73	--	--	--	--	--	--	Soft bottom.	
12/27/16	11:25	11.28	832.24	52.88	790.64	0.07	--	--	--	--	--	--	Firm bottom.	
12/21/17	11:53	12.14	831.38	52.90	790.62	0.05	--	--	--	--	--	--	Soft bottom, sediment on bottom of probe.	

Top of Casing (FAMSL) = 843.52  
 Well bottom elev. (installed; FAMSL) = 790.57  
 Installed Well Depth (ft) = 52.95

**Notes:**

- Elevations referenced to the NAVD 88 Datum.
  - Surface elevation = the elevation of the vault lid or curb box lid.
  - Used weighted measuring tape for depth to bottom starting on 7/24/07.
  - Well bottom elevations are approximate.
- FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-10						Comments/Observations	
							LNAPL			DNAPL				
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)		
01/18/07	13:20	9.99	833.92	16.44	827.47	0.16	--	--	--	--	--	--	Soft bottom.	
04/25/07	NR	9.60	834.31	16.20	827.71	0.40	--	--	--	--	--	--	Soft bottom, trace sheen on probe.	
05/30/07	NR	11.89	832.02	16.31	827.60	0.29	--	--	--	--	--	--		
06/27/07	10:16	12.40	831.51	16.05	827.86	0.55	--	--	--	--	--	--	Mild coal-tar-like odor, Silt on the last 2" of probe, trace sheen on probe.	
07/24/07	11:01	12.41	831.50	16.78	827.13	-0.18	--	--	--	--	--	--	Able to penetrate sediment in well 0.6', black material on probe, trace coal-tar-like blebs on probe.	
08/28/07	10:56	12.90	831.01	16.07	827.84	0.53	--	--	--	--	--	--	Soft bottom, approximately 3" Silt on end of probe, mild manure-like odor.	
09/20/07	10:33	12.99	830.92	16.26	827.65	0.34	--	--	--	--	--	--	Brown material on probe (from water surface), bubbles on water surface, able to penetrate sediment in well 0.2', coal-tar-like odor and coal-tar-like material on probe.	
10/31/07	9:43	11.73	832.18	16.31	827.60	0.29	--	--	--	--	--	--	Able to penetrate sediment in well 0.3', VOCs = 2.2 ppm.	
11/20/07	10:15	11.46	832.45	16.16	827.75	0.44	--	--	--	--	--	--	Sediment on probe, strong coal-tar-like odor.	
12/18/07	10:18	11.16	832.75	16.22	827.69	0.38	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:02	11.24	832.67	16.00	827.91	0.60	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
02/21/08	14:23	10.18	833.73	16.34	827.57	0.26	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
03/18/08	11:57	9.89	834.02	16.26	827.65	0.34	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, sheen on sediment on probe.	
05/12/08	8:25	11.39	832.52	16.37	827.54	0.23	--	--	--	--	--	--	Sediment on probe, coal-tar-like odor.	
06/05/08	12:49	12.51	831.40	16.79	827.12	-0.19	--	--	--	--	--	--	Soft, approximately 0.6' of gray sediment, trace sheen.	
07/08/08	9:02	12.42	831.49	16.25	827.66	0.35	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, sediment on probe.	
08/06/08	9:12	12.48	831.43	16.34	827.57	0.26	--	--	--	--	--	--	Coal-tar-like odor.	
11/19/08	9:01	12.09	831.82	16.80	827.11	-0.20	--	--	--	--	--	--	Firm bottom.	
02/06/09	11:06	12.15	831.76	16.59	827.32	0.01	--	--	--	--	--	--		
05/29/09	12:16	11.16	832.75	16.43	827.48	0.17	--	--	--	--	--	--	Firm bottom, soil around vault has settled.	
08/11/09	10:22	11.09	832.82	16.49	827.42	0.11	--	--	--	--	--	--	Soft bottom, 4" of sediment on probe.	
11/09/09	11:44	11.62	832.29	16.39	827.52	0.21	--	--	--	--	--	--	Soft bottom, 2" of sediment on probe.	
02/23/10	9:42	12.21	831.70	16.28	827.63	0.32	--	--	--	--	--	--	Very soft bottom, 1" of sediment on probe, measured top of sediment at 15.81' (TIC), approximately 0.79' of sediment in well, 0.2 ppm.	
05/28/10	11:44	12.28	831.63	16.07	827.84	0.53	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:23	12.12	831.79	16.00	827.91	0.60	--	--	--	--	--	--	Sediment on probe, coal tar-like odor, 0.0 ppm.	
11/23/10	11:10	11.39	832.52	16.08	827.83	0.52	--	--	--	--	--	--	Soft bottom.	
02/28/11	10:53	11.35	832.56	16.12	827.79	0.48	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:10	10.56	833.35	16.20	827.71	0.40	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/26/11	9:20	12.41	831.50	16.24	827.67	0.36	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
02/15/12	13:25	11.72	832.19	16.06	827.85	0.54	--	--	--	--	--	--	Soft bottom, 0.0 ppm; trace sheen on probe.	
06/15/12	11:52	11.91	832.00	16.33	827.58	0.27	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
11/19/12	10:35	11.76	832.15	16.34	827.57	0.26	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
11/26/13	11:20	11.55	832.36	15.94	827.97	0.66	--	--	--	--	--	--	Soft bottom.	
05/16/14	9:00	10.72	833.19	15.99	827.92	0.61	--	--	--	--	--	--	Soft bottom.	
12/01/14	13:42	11.31	832.60	15.87	828.04	0.73	--	--	--	--	--	--	Soft bottom.	
12/17/15	9:55	11.54	832.37	15.91	828.00	0.69	--	--	--	--	--	--	Soft bottom.	
12/27/16	11:30	10.80	833.11	16.20	827.71	0.40	--	--	--	--	--	--	Soft bottom.	
12/21/17	11:58	11.69	832.22	16.26	827.65	0.34	--	--	--	--	--	--	Firm bottom.	

Top of Casing (FAMSL) = 843.91  
 Well bottom elev. (installed; FAMSL) = 827.31  
 Installed Well Depth (ft) = 16.60

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.

FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-11						Comments/Observations	
							LNAPL			DNAPL				
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)		
01/18/07	13:23	9.97	833.87	49.51	794.33	0.19	--	--	--	--	--	--	Soft bottom.	
04/25/07	NR	9.60	834.24	49.50	794.34	0.20	--	--	--	--	--	--	Soft bottom, mothball-like odor.	
05/30/07	NR	11.87	831.97	49.80	794.04	-0.10	--	--	--	--	--	--	Trace Silt on probe.	
06/27/07	10:23	12.40	831.44	49.52	794.32	0.18	--	--	--	--	--	--	Mild coal-tar-like odor, trace Silt on probe, black material on probe and tape.	
07/24/07	11:06	12.39	831.45	49.49	794.35	0.21	--	--	--	--	--	--	Able to penetrate sediment in well 0.3', black material on probe.	
08/28/07	10:59	12.90	830.94	49.50	794.34	0.20	--	--	--	--	--	--	Soft bottom, manure-like odor.	
09/20/07	10:40	12.97	830.87	49.39	794.45	0.31	--	--	--	--	--	--	Brown material on probe (from water surface), bubbles on water surface, firm bottom.	
10/31/07	9:46	11.71	832.13	49.36	794.48	0.34	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 4.5 ppm.	
11/20/07	10:20	11.44	832.43	49.39	794.45	0.31	--	--	--	--	--	--	Coal-tar-like odor.	
12/18/07	10:23	11.13	832.71	49.75	794.09	-0.05	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:00	11.21	832.63	49.37	794.47	0.33	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
02/21/08	14:25	10.17	833.67	49.40	794.44	0.30	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
03/18/08	11:59	9.86	833.98	49.37	794.47	0.33	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
05/12/08	8:26	11.39	832.45	49.38	794.46	0.32	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
06/05/08	12:50	12.50	831.34	49.36	794.48	0.34	--	--	--	--	--	--		
07/08/08	9:07	12.58	831.26	49.38	794.46	0.32	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
08/06/08	9:15	12.47	831.37	49.45	794.39	0.25	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
11/19/08	9:03	12.05	831.79	49.40	794.44	0.30	--	--	--	--	--	--	Firm bottom.	
02/06/09	11:09	12.14	831.70	49.25	794.59	0.45	--	--	--	--	--	--		
05/29/09	12:17	11.36	832.48	49.39	794.45	0.31	--	--	--	--	--	--	Firm bottom, soil around vault has settled.	
08/11/09	10:26	11.07	832.77	49.30	794.54	0.40	--	--	--	--	--	--	Firm bottom.	
11/09/09	11:45	11.62	832.22	49.41	794.43	0.29	--	--	--	--	--	--	Firm bottom.	
02/23/10	9:45	12.21	831.63	49.36	794.48	0.34	--	--	--	--	--	--	Firm bottom, 0.1 ppm.	
05/28/10	11:45	12.23	831.61	49.55	794.29	0.15	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:28	12.05	831.79	49.40	794.44	0.30	--	--	--	--	--	--	0.0 ppm.	
11/23/10	11:11	11.41	832.43	49.37	794.47	0.33	--	--	--	--	--	--	0.0 ppm.	
02/28/11	10:57	11.37	832.47	49.41	794.43	0.29	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:12	10.55	833.29	49.32	794.52	0.38	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:22	12.41	831.43	49.32	794.52	0.38	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	13:28	11.92	831.92	43.64	800.20	6.06	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/15/12	11:51	12.11	831.73	43.60	800.24	6.10	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
11/19/12	10:32	12.09	831.75	39.48	804.36	10.22	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
11/26/13	11:21	12.38	831.46	39.44	804.40	10.26	--	--	--	--	--	--	Soft bottom.	
05/16/14	9:05	11.45	832.39	39.52	804.32	10.18	--	--	--	--	--	--	Soft bottom.	
12/01/14	13:45	12.15	831.69	39.33	804.51	10.37	--	--	--	--	--	--	Soft bottom.	
12/17/15	9:50	12.37	831.47	39.30	804.54	10.40	--	--	--	--	--	--	Soft bottom.	
12/27/16	11:40	11.65	832.19	39.33	804.51	10.37	--	--	--	--	--	--	Soft bottom.	
12/21/17	11:55	12.53	831.31	39.41	804.43	10.29	--	--	--	--	--	--	Firm bottom, 0.3' of sediment on bottom of probe.	

Top of Casing (FAMSL) = 843.84  
 Well bottom elev. (installed; FAMSL) = 794.14  
 Installed Well Depth (ft) = 49.70

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.
5. Well RW-11 was redeveloped on July 26, 2012.
6. Well RW-11 was redeveloped on May 29, 2013.

FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-12										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	13:39	11.09	833.56	47.92	796.73	0.04	--	--	--	--	--	--	Soft bottom.
04/25/07	NR	10.53	834.12	47.95	796.70	0.01	--	--	--	--	--	--	Vault has been damaged, sides of vault have been pushed in, j-plugs cannot be placed in wells because the vault has settled and cannot close properly with j-plugs in place. This may have been caused by heavy equipment driving near vault and compacting sediment around vault (there are long plastic pipes stacked next to vault).
05/30/07	NR	12.68	831.97	48.00	796.65	-0.04	--	--	--	--	--	--	
06/27/07	10:32	13.42	831.23	48.05	796.60	-0.09	--	--	--	--	--	--	Mild coal-tar-like odor, trace Silt on probe.
07/24/07	11:12	13.28	831.37	47.88	796.77	0.08	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', sediment at water surface, no apparent odor.
08/28/07	11:03	13.68	830.97	48.00	796.65	-0.04	--	--	--	--	--	--	Soft bottom. Vault lid was difficult to close, appears that vault has had more damage done since the last time fluid levels were measured.
09/20/07	10:47	13.77	830.88	47.90	796.75	0.06	--	--	--	--	--	--	Soft bottom, slight coal-tar-like odor, drain material in vault has settled approximately 2.0'.
10/31/07	9:53	12.69	831.96	47.87	796.78	0.09	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 1.8 ppm.
11/20/07	10:24	12.47	832.18	48.00	796.65	-0.04	--	--	--	--	--	--	Mild coal-tar-like odor.
12/18/07	10:11	12.02	832.63	47.92	796.73	0.04	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	10:58	12.01	832.64	47.83	796.82	0.13	--	--	--	--	--	--	Soft bottom.
02/21/08	14:35	11.08	833.57	47.93	796.72	0.03	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
03/18/08	12:08	10.62	834.03	47.90	796.75	0.06	--	--	--	--	--	--	Soft bottom.
05/12/08	8:19	12.60	832.05	47.90	796.75	0.06	--	--	--	--	--	--	Soft bottom.
06/05/08	13:36	13.29	831.36	47.90	796.75	0.06	--	--	--	--	--	--	
07/08/08	9:12	13.69	830.96	47.95	796.70	0.01	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
08/06/08	9:18	13.24	831.41	47.95	796.70	0.01	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
11/19/08	9:11	13.13	831.52	47.93	796.72	0.03	--	--	--	--	--	--	
02/06/09	11:27	13.06	831.59	47.88	796.77	0.08	--	--	--	--	--	--	
05/29/09	12:19	12.72	831.93	47.90	796.75	0.06	--	--	--	--	--	--	Soil around the outside and on the inside of the vault has settled.
08/11/09	10:30	12.32	832.33	47.92	796.73	0.04	--	--	--	--	--	--	Soft bottom.
11/09/09	11:50	12.51	832.14	47.92	796.73	0.04	--	--	--	--	--	--	Soft bottom.
02/23/10	9:51	13.03	831.62	47.90	796.75	0.06	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, 0.2 ppm.
05/28/10	11:47	13.01	831.64	47.89	796.76	0.07	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	10:34	12.97	831.68	47.95	796.70	0.01	--	--	--	--	--	--	0.0 ppm.
11/23/10	11:14	12.32	832.33	47.93	796.72	0.03	--	--	--	--	--	--	Soft bottom.
02/28/11	11:05	12.42	832.23	47.88	796.77	0.08	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	11:15	11.11	833.54	47.90	796.75	0.06	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
08/26/11	9:24	13.13	831.52	47.90	796.75	0.06	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
02/15/12	13:36	12.76	831.89	47.85	796.80	0.11	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
06/15/12	11:46	13.07	831.58	47.85	796.80	0.11	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	10:30	12.95	831.70	47.88	796.77	0.08	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	11:23	13.25	831.40	47.80	796.85	0.16	--	--	--	--	--	--	Soft bottom.
05/16/14	9:10	12.35	832.30	47.90	796.75	0.06	--	--	--	--	--	--	Firm bottom.
12/01/14	13:48	13.17	831.48	47.78	796.87	0.18	--	--	--	--	--	--	Firm bottom.
12/17/15	10:05	13.38	831.27	47.64	797.01	0.32	--	--	--	--	--	--	Firm bottom.
12/27/16	11:45	12.70	831.95	47.86	796.79	0.10	--	--	--	--	--	--	Firm bottom.
12/21/17	12:02	13.46	831.19	47.88	796.77	0.08	--	--	--	--	--	--	Firm bottom.

Top of Casing (FAMSL) = 844.65  
 Well bottom elev. (installed; FAMSL) = 796.69  
 Installed Well Depth (ft) = 47.96

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.

FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-13						Comments/Observations	
							LNAPL			DNAPL				
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)									
01/18/07	13:33	11.03	833.72	14.99	829.76	3.71	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
04/25/07	NR	10.52	834.23	14.89	829.86	3.81	--	--	--	--	--	--	Vault has been damaged, sides of vault have been pushed in, j-plugs cannot be placed in wells because the vault has settled and cannot close properly with j-plugs in place. This may have been caused by heavy equipment driving near vault and compacting sediment around vault (there are long plastic pipes stacked next to vault).	
05/30/07	NR	12.70	832.05	14.95	829.80	3.75	--	--	--	--	--	--		
06/27/07	10:36	13.35	831.40	13.50	831.25	5.20	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor. Silt on the last 2" of probe.	
07/24/07	11:16	13.11	831.64	13.48	831.27	5.22	--	--	--	--	--	--	Able to penetrate sediment in well 0.5', organic-like odor, brown sediment at water surface.	
08/28/07	11:06	13.30	831.45	13.30	831.45	5.40	--	--	--	--	--	--	Meter sounded at the bottom of well (saturated sediment in well bottom), approximately 1.5" of Silt on end of probe. Vault lid was difficult to close, appears that vault has had more damage done since the last time fluid levels were measured.	
09/20/07	10:54	13.25	831.50	13.25	831.50	5.45	--	--	--	--	--	--	Meter sounded when it hit the sediment at the bottom of the well (saturated sediment in well bottom), no measurable water in well, sediment on the probe, drain material in vault has settled approximately 2.0'.	
10/31/07	9:57	12.68	832.07	13.19	831.56	5.51	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 1.3 ppm.	
11/20/07	10:29	12.22	832.53	13.22	831.53	5.48	--	--	--	--	--	--	Firm bottom.	
12/18/07	10:15	12.02	832.73	13.18	831.57	5.52	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	10:56	12.03	832.72	13.14	831.61	5.56	--	--	--	--	--	--		
02/21/08	14:36	11.06	833.69	13.43	831.32	5.27	--	--	--	--	--	--	Firm bottom.	
03/18/08	12:05	10.61	834.14	13.38	831.37	5.32	--	--	--	--	--	--	Firm bottom.	
05/12/08	8:18	12.59	832.16	12.55	832.20	6.15	--	--	--	--	--	--	Soft bottom.	
06/05/08	13:37	13.32	831.43	18.60	826.15	0.10	--	--	--	--	--	--	Hard bottom, well redeveloped on June 5th 2008.	
07/08/08	9:15	13.71	831.04	18.55	826.20	0.15	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.	
08/06/08	9:20	13.25	831.50	18.55	826.20	0.15	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.	
11/19/08	9:12	13.12	831.63	18.55	826.20	0.15	--	--	--	--	--	--		
02/06/09	11:29	13.09	831.66	18.63	826.12	0.07	--	--	--	--	--	--	Brown NAPL-like material on tip of probe, coal-tar-like odor.	
05/29/09	12:20	12.45	832.30	18.67	826.08	0.03	--	--	--	--	--	--	Soil around the outside and on the inside of the vault has settled.	
08/11/09	10:34	12.33	832.42	17.79	826.96	0.91	--	--	--	--	--	--	Firm bottom, slight odor.	
11/09/09	11:55	12.51	832.24	17.78	826.97	0.92	--	--	--	--	--	--	Firm bottom.	
02/23/10	9:52	13.04	831.71	17.70	827.05	1.00	--	--	--	--	--	--	Soft bottom, 0.1 ppm.	
05/28/10	11:46	13.01	831.74	17.62	827.13	1.08	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:37	12.92	831.83	17.50	827.25	1.20	--	--	--	--	--	--	0.0 ppm.	
11/23/10	11:15	12.32	832.43	17.75	827.00	0.95	--	--	--	--	--	--	Firm bottom.	
02/28/11	11:09	12.02	832.73	17.62	827.13	1.08	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:17	11.08	833.67	17.37	827.38	1.33	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:25	13.07	831.68	17.36	827.39	1.34	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
02/15/12	13:39	12.76	831.99	15.83	828.92	2.87	--	--	--	--	--	--	Soft bottom, coal tar-like odor, 0.0 ppm.	
06/15/12	11:45	12.99	831.76	17.60	827.15	1.10	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
11/19/12	10:25	12.97	831.78	18.55	826.20	0.15	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:24	13.25	831.50	18.50	826.25	0.20	--	--	--	--	--	--	Soft bottom.	
05/16/14	9:13	12.37	832.38	18.52	826.23	0.18	--	--	--	--	--	--	Firm bottom.	
12/01/14	13:50	13.14	831.61	18.47	826.28	0.23	--	--	--	--	--	--	Firm bottom.	
12/17/15	10:00	13.38	831.37	18.42	826.33	0.28	--	--	--	--	--	--	Firm bottom.	
12/27/16	11:50	12.65	832.10	18.47	826.28	0.23	--	--	--	--	--	--	Firm bottom.	
12/21/17	12:00	13.46	831.29	18.52	826.23	0.18	--	--	--	--	--	--	Firm bottom.	

Top of Casing (FAMSL) = 844.75  
Well bottom elev. (installed; FAMSL) = 826.05  
Installed Well Depth (ft) = 18.70

**Notes:**

- Elevations referenced to the NAVD 88 Datum.
- Surface elevation = the elevation of the vault lid or curb box lid.
- Used weighted measuring tape for depth to bottom starting on 7/24/07.
- Well bottom elevations are approximate.
- Well RW-13 was redeveloped on June 5th 2008 and July 27, 2012.

FAMSL = Feet Above Mean Sea Level.

TOC = Top of Casing.

-- = NAPL not present.

NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-14										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	13:44	12.07	833.20	17.09	828.18	0.51	--	--	--	--	--	--	Soft bottom.
04/25/07	NR	11.57	833.70	17.20	828.07	0.40	--	--	--	--	--	--	
05/30/07	NR	14.74	830.53	17.07	828.20	0.53	--	--	--	--	--	--	
06/27/07	10:47	14.45	830.82	17.16	828.11	0.44	--	--	--	--	--	--	Mild, coal-tar-like odor, Silt on the last 2" of probe.
07/24/07	11:20	14.33	830.94	17.69	827.58	-0.09	--	--	--	--	--	--	Able to penetrate sediment in well 0.7', trace sheen and black material on end of probe, faint coal-tar-like odor.
08/28/07	11:10	14.72	830.55	17.12	828.15	0.48	--	--	--	--	--	--	Silt on end of probe, mild manure-like odor.
09/20/07	11:01	14.83	830.44	17.00	828.27	0.60	--	--	--	--	--	--	Firm bottom.
10/31/07	10:09	13.75	831.52	17.04	828.23	0.56	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 0.5 ppm.
11/20/07	10:34	13.45	831.82	17.05	828.22	0.55	--	--	--	--	--	--	Coal-tar-like odor.
12/18/07	10:20	13.05	832.22	17.30	827.97	0.30	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	10:53	13.06	832.21	16.93	828.34	0.67	--	--	--	--	--	--	
02/21/08	14:45	12.11	833.16	17.15	828.12	0.45	--	--	--	--	--	--	Firm bottom.
03/18/08	12:12	11.64	833.63	17.15	828.12	0.45	--	--	--	--	--	--	Firm bottom.
05/12/08	8:17	12.63	832.64	17.05	828.22	0.55	--	--	--	--	--	--	Soft bottom.
06/05/08	13:44	14.33	830.94	17.14	828.13	0.46	--	--	--	--	--	--	Hard bottom.
07/08/08	9:17	14.72	830.55	17.17	828.10	0.43	--	--	--	--	--	--	Firm bottom, coal-tar-like-odor.
08/06/08	9:24	14.28	830.99	17.12	828.15	0.48	--	--	--	--	--	--	Firm bottom, coal-tar-like-odor.
11/19/08	10:45	14.12	831.15	17.10	828.17	0.50	--	--	--	--	--	--	
02/06/09	11:37	14.08	831.19	17.05	828.22	0.55	--	--	--	--	--	--	Firm bottom.
05/29/09	12:25	13.76	831.51	17.12	828.15	0.48	--	--	--	--	--	--	Firm bottom.
08/11/09	10:37	13.42	831.85	17.11	828.16	0.49	--	--	--	--	--	--	Firm bottom.
11/09/09	11:56	13.53	831.74	17.11	828.16	0.49	--	--	--	--	--	--	Firm bottom.
02/23/10	9:59	14.04	831.23	17.05	828.22	0.55	--	--	--	--	--	--	Firm bottom, 0.1 ppm.
05/28/10	11:50	13.99	831.28	17.00	828.27	0.60	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	10:42	13.86	831.41	17.08	828.19	0.52	--	--	--	--	--	--	0.0 ppm.
11/23/10	11:16	13.29	831.98	17.07	828.20	0.53	--	--	--	--	--	--	Firm bottom.
02/28/11	11:15	13.32	831.95	17.00	828.27	0.60	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	11:20	12.07	833.20	17.02	828.25	0.58	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
08/26/11	9:36	14.13	831.14	17.06	828.21	0.54	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
02/15/12	13:45	13.81	831.46	17.09	828.18	0.51	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
06/15/12	11:42	14.29	830.98	17.10	828.17	0.50	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	10:20	13.99	831.28	17.02	828.25	0.58	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/26/13	11:25	14.30	830.97	17.05	828.22	0.55	--	--	--	--	--	--	Soft bottom.
05/16/14	9:17	13.41	831.86	16.98	828.29	0.62	--	--	--	--	--	--	Soft bottom.
12/01/14	13:55	14.18	831.09	17.04	828.23	0.56	--	--	--	--	--	--	Soft bottom.
12/17/15	10:10	14.39	830.88	17.00	828.27	0.60	--	--	--	--	--	--	Soft bottom.
12/27/16	11:52	13.70	831.57	17.17	828.10	0.43	--	--	--	--	--	--	Soft bottom.
12/21/17	12:03	14.50	830.77	17.07	828.20	0.53	--	--	--	--	--	--	Firm bottom.

Top of Casing (FAMSL) = 845.27  
 Well bottom elev. (installed; FAMSL) = 827.67  
 Installed Well Depth (ft) = 17.60

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.
- FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-15						Comments/Observations	
							LNAPL			DNAPL				
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)									
01/18/07	13:46	12.07	833.16	48.98	796.25	0.22	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
04/25/07	NR	11.54	833.69	48.95	796.28	0.25	--	--	--	--	--	--		
05/30/07	NR	13.66	831.57	49.30	795.93	-0.10	--	--	--	--	--	--		
06/27/07	10:51	14.43	830.80	49.00	796.23	0.20	--	--	--	--	--	--	Trace Silt on probe, mild coal-tar-like odor.	
07/24/07	11:27	14.28	830.95	48.95	796.28	0.25	--	--	--	--	--	--	Able to penetrate sediment in well 0.2', trace coal-tar-like blebs and black material on end of probe, organic-like odor.	
08/28/07	11:13	14.68	830.55	48.97	796.26	0.23	--	--	--	--	--	--	Orange material on probe.	
09/20/07	11:06	14.78	830.45	48.95	796.28	0.25	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
10/31/07	10:13	13.70	831.53	48.91	796.32	0.29	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 0.9 ppm.	
11/20/07	10:38	13.42	831.81	49.05	796.18	0.15	--	--	--	--	--	--	Coal-tar-like odor.	
12/18/07	10:29	13.02	832.21	51.72	793.51	-2.52	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	10:50	12.99	832.24	48.89	796.34	0.31	--	--	--	--	--	--	Soft bottom.	
02/21/08	14:46	12.08	833.15	48.90	796.33	0.30	--	--	--	--	--	--	Firm bottom.	
03/18/08	12:10	11.60	833.63	48.90	796.33	0.30	--	--	--	--	--	--	Firm bottom.	
05/12/08	8:15	12.57	832.66	48.95	796.28	0.25	--	--	--	--	--	--	Firm bottom.	
06/05/08	13:45	14.28	830.95	48.90	796.33	0.30	--	--	--	--	--	--	Hard bottom.	
07/08/08	9:19	14.69	830.54	48.93	796.30	0.27	--	--	--	--	--	--	Coal-tar-like odor.	
08/06/08	9:25	14.21	831.02	49.29	795.94	-0.09	--	--	--	--	--	--	Coal-tar-like odor.	
11/19/08	10:47	14.10	831.13	48.97	796.26	0.23	--	--	--	--	--	--		
02/06/09	11:41	14.04	831.19	49.02	796.21	0.18	--	--	--	--	--	--	Firm bottom.	
05/29/09	12:30	13.42	831.81	48.92	796.31	0.28	--	--	--	--	--	--	Hard bottom.	
08/11/09	10:40	13.32	831.91	48.90	796.33	0.30	--	--	--	--	--	--	Firm bottom.	
11/09/09	11:58	13.52	831.71	48.90	796.33	0.30	--	--	--	--	--	--	Firm bottom.	
02/23/10	10:03	14.02	831.21	48.95	796.28	0.25	--	--	--	--	--	--	Firm bottom, 0.2 ppm.	
05/28/10	11:55	13.99	831.24	48.95	796.28	0.25	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:45	13.89	831.34	48.95	796.28	0.25	--	--	--	--	--	--	0.0 ppm.	
11/23/10	11:17	13.29	831.94	49.04	796.19	0.16	--	--	--	--	--	--	Firm bottom.	
02/28/11	11:18	13.39	831.84	48.95	796.28	0.25	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:22	12.08	833.15	48.90	796.33	0.30	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/26/11	9:37	14.12	831.11	48.80	796.43	0.40	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	13:49	13.75	831.48	47.85	797.38	1.35	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	11:41	13.72	831.51	47.86	797.37	1.34	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	10:15	13.96	831.27	48.87	796.36	0.33	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:26	14.30	830.93	48.85	796.38	0.35	--	--	--	--	--	--	Soft bottom.	
05/16/14	9:20	13.35	831.88	49.02	796.21	0.18	--	--	--	--	--	--	Firm bottom.	
12/01/14	13:59	14.15	831.08	48.98	796.25	0.22	--	--	--	--	--	--	Firm bottom.	
12/17/15	10:15	14.35	830.88	48.82	796.41	0.38	--	--	--	--	--	--	Firm bottom.	
12/27/16	12:00	13.63	831.60	48.82	796.41	0.38	--	--	--	--	--	--	Firm bottom.	
12/21/17	12:05	14.46	830.77	48.86	796.37	0.34	--	--	--	--	--	--	Firm bottom.	

Top of Casing (FAMSL) = 845.23  
 Well bottom elev. (installed; FAMSL) = 796.03  
 Installed Well Depth (ft) = 49.20

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.
- FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-16										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	14:39	14.81	833.60	49.73	798.68	0.18	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
04/25/07	NR	14.21	834.20	49.75	798.66	0.16	--	--	--	--	--	--	Bubbles at surface of water, black material on probe.
05/30/07	NR	16.30	832.11	49.85	798.56	0.06	--	--	--	--	--	--	Trace Silt on probe.
06/27/07	11:13	17.05	831.36	49.80	798.61	0.11	--	--	--	--	--	--	Mild coal-tar-like odor, black material on probe.
07/24/07	11:35	16.95	831.46	49.78	798.63	0.13	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', strong coal-tar-like odor, trace coal-tar-like blebs on probe.
08/28/07	11:22	17.32	831.09	49.75	798.66	0.16	--	--	--	--	--	--	Firm bottom.
09/20/07	11:14	17.42	830.99	49.62	798.79	0.29	--	--	--	--	--	--	Soft bottom, brown material on probe (from water surface), slight coal-tar-like odor, coal-tar-like material on probe.
10/31/07	10:27	16.37	832.04	49.64	798.77	0.27	--	--	--	--	--	--	Firm bottom, brown slime on probe (from water surface), VOCs = 0.8 ppm.
11/20/07	10:45	16.09	832.32	49.80	798.61	0.11	--	--	--	--	--	--	Manure-like odor.
12/18/07	10:38	15.66	832.75	49.92	798.49	-0.01	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	11:35	15.61	832.80	49.78	798.63	0.13	--	--	--	--	--	--	Soft bottom.
02/21/08	15:31	14.73	833.68	49.75	798.66	0.16	--	--	--	--	--	--	Soft bottom, manure-like odor.
03/18/08	12:20	14.21	834.20	49.75	798.66	0.16	--	--	--	--	--	--	Firm bottom, coal-tar-like odor, trace brown/black sticky coal-tar-like material on probe, bubbles on the water surface, brown slimy material on probe from water surface.
05/12/08	8:55	16.17	832.24	49.77	798.64	0.14	--	--	--	--	--	--	Firm bottom.
06/05/08	13:56	16.85	831.56	49.70	798.71	0.21	--	--	--	--	--	--	Sheen, foam.
07/08/08	9:23	17.26	831.15	49.72	798.69	0.19	--	--	--	--	--	--	Firm bottom.
08/06/08	9:32	16.83	831.58	49.75	798.66	0.16	--	--	--	--	--	--	Coal-tar-like odor.
11/19/08	10:50	16.73	831.68	49.70	798.71	0.21	--	--	--	--	--	--	
02/06/09	11:49	16.61	831.80	49.65	798.76	0.26	--	--	--	--	--	--	
05/29/09	12:40	16.13	832.28	49.69	798.72	0.22	--	--	--	--	--	--	Firm bottom, brown foam on the surface of the water.
08/11/09	10:47	16.09	832.32	49.69	798.72	0.22	--	--	--	--	--	--	Firm bottom.
11/09/09	12:01	16.09	832.32	49.65	798.76	0.26	--	--	--	--	--	--	Firm bottom.
02/23/10	10:07	16.62	831.79	49.70	798.71	0.21	--	--	--	--	--	--	0.0 ppm.
05/28/10	10:45	16.59	831.82	49.69	798.72	0.22	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	10:52	16.52	831.89	49.65	798.76	0.26	--	--	--	--	--	--	Mild coal tar-like odor, 0.0 ppm.
11/23/10	11:22	15.92	832.49	49.61	798.80	0.30	--	--	--	--	--	--	Firm bottom.
02/28/11	11:35	16.04	832.37	49.35	799.06	0.56	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	11:26	14.61	833.80	49.61	798.80	0.30	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
08/26/11	9:39	16.72	831.69	49.64	798.77	0.27	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
02/15/12	13:59	16.36	832.05	49.62	798.79	0.29	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
06/15/12	11:30	16.54	831.87	49.62	798.79	0.29	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	11:25	16.58	831.83	49.65	798.76	0.26	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	11:35	16.90	831.51	49.69	798.72	0.22	--	--	--	--	--	--	Soft bottom.
05/16/14	9:30	15.98	832.43	49.68	798.73	0.23	--	--	--	--	--	--	Firm bottom.
12/01/14	14:05	16.83	831.58	49.60	798.81	0.31	--	--	--	--	--	--	Firm bottom.
12/17/15	10:40	17.03	831.38	49.60	798.81	0.31	--	--	--	--	--	--	Firm bottom.
12/27/16	12:05	16.38	832.03	49.58	798.83	0.33	--	--	--	--	--	--	Firm bottom.
12/21/17	12:22	17.08	831.33	49.63	798.78	0.28	--	--	--	--	--	--	Firm bottom.

Top of Casing (FAMSL) = 848.41  
 Well bottom elev. (installed; FAMSL) = 798.50  
 Installed Well Depth (ft) = 49.91

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.

FAMSL = Feet Above Mean Sea Level.

TOC = Top of Casing.

-- = NAPL not present.

NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-17						Comments/Observations	
							LNAPL			DNAPL				
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)		
01/18/07	14:36	14.80	833.54	24.34	824.00	0.16	--	--	--	--	--	--	Soft bottom.	
04/25/07	NR	14.17	834.17	24.35	823.99	0.15	--	--	--	--	--	--	Bubbles at surface of water, black material on probe.	
05/30/07	NR	16.28	832.06	24.34	824.00	0.16	--	--	--	--	--	--	Trace Silt on probe.	
06/27/07	11:17	17.02	831.32	24.78	823.56	-0.28	--	--	--	--	--	--	Black material on probe.	
07/24/07	11:39	16.92	831.42	24.70	823.64	-0.20	--	--	--	--	--	--	Able to penetrate sediment in well 0.5', black material on probe, trace coal-tar-like blebs on probe.	
08/28/07	11:25	17.27	831.07	24.32	824.02	0.18	--	--	--	--	--	--	Firm bottom.	
09/20/07	11:19	17.38	830.96	24.42	823.92	0.08	--	--	--	--	--	--	Firm bottom, brown material on probe (from water surface).	
10/31/07	10:31	16.34	832.00	24.33	824.01	0.17	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 0.9 ppm.	
11/20/07	10:48	16.09	832.25	24.39	823.95	0.11	--	--	--	--	--	--	Mild coal-tar-like odor.	
12/18/07	10:41	15.65	832.69	24.53	823.81	-0.03	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:37	15.59	832.75	24.37	823.97	0.13	--	--	--	--	--	--	Soft bottom.	
02/21/08	15:35	14.72	833.62	24.45	823.89	0.05	--	--	--	--	--	--	Firm bottom.	
03/18/08	12:18	14.19	834.15	24.49	823.85	0.01	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, trace brown/black sticky coal-tar-like material on probe, bubbles on the water surface.	
05/12/08	8:57	16.11	832.23	24.53	823.81	-0.03	--	--	--	--	--	--	Firm bottom.	
06/05/08	13:57	16.83	831.51	24.70	823.64	-0.20	--	--	--	--	--	--	Slightly soft.	
07/08/08	9:26	17.21	831.13	24.65	823.69	-0.15	--	--	--	--	--	--	Firm bottom, trace streaks of yellow coal-tar-like material on probe, coal-tar-like odor.	
08/06/08	9:35	16.82	831.52	24.35	823.99	0.15	--	--	--	--	--	--	Coal-tar-like odor.	
11/19/08	10:51	16.73	831.61	24.65	823.69	-0.15	--	--	--	--	--	--		
02/06/09	11:52	16.59	831.75	24.41	823.93	0.09	--	--	--	--	--	--		
05/29/09	12:41	16.09	832.25	24.54	823.80	-0.04	--	--	--	--	--	--	Hard bottom, riser leaning toward the south.	
08/11/09	10:50	16.06	832.28	24.61	823.73	-0.11	--	--	--	--	--	--	Firm bottom, slight odor.	
11/09/09	12:02	16.09	832.25	24.69	823.65	-0.19	--	--	--	--	--	--	Firm bottom.	
02/23/10	10:10	16.60	831.74	24.65	823.69	-0.15	--	--	--	--	--	--	0.0 ppm.	
05/28/10	10:51	16.56	831.78	24.40	823.94	0.10	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/30/10	10:54	16.50	831.84	24.50	823.84	0.00	--	--	--	--	--	--	0.0 ppm.	
11/23/10	11:24	15.91	832.43	24.33	824.01	0.17	--	--	--	--	--	--	Firm bottom.	
02/28/11	11:40	16.05	832.29	24.28	824.06	0.22	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	11:28	14.57	833.77	24.43	823.91	0.07	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
08/26/11	9:40	16.71	831.63	24.46	823.88	0.04	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
02/15/12	14:03	16.34	832.00	24.46	823.88	0.04	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	11:30	18.10	830.24	24.46	823.88	0.04	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	11:20	16.54	831.80	24.40	823.94	0.10	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/26/13	11:33	16.87	831.47	24.52	823.82	-0.02	--	--	--	--	--	--	Soft bottom.	
05/16/14	9:35	15.97	832.37	24.52	823.82	-0.02	--	--	--	--	--	--	Firm bottom.	
12/01/14	14:10	16.81	831.53	24.55	823.79	-0.05	--	--	--	--	--	--	Firm bottom.	
12/17/15	10:41	16.99	831.35	24.35	823.99	0.15	--	--	--	--	--	--	Firm bottom.	
12/27/16	12:10	16.31	832.03	24.43	823.91	0.07	--	--	--	--	--	--	Firm bottom.	
12/21/17	12:23	17.45	830.89	24.45	823.89	0.05	--	--	--	--	--	--	Firm bottom.	

Top of Casing (FAMSL) = 848.34  
Well bottom elev. (installed; FAMSL) = 823.84  
Installed Well Depth (ft) = 24.50

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
2. Surface elevation = the elevation of the vault lid or curb box lid.
3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
4. Well bottom elevations are approximate.
5. Installed well depth is an average of measured depths to bottom for measurements taken from 1/18/07-7/08/08.

FAMSL = Feet Above Mean Sea Level.  
TOC = Top of Casing.  
-- = NAPL not present.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-18										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	14:52	12.23	833.59	42.08	803.74	-0.10	--	--	--	--	--	--	Soft bottom.
04/25/07	NR	11.62	834.20	42.05	803.77	-0.07	--	--	--	--	--	--	Coal-tar-like odor.
05/30/07	NR	13.71	832.11	42.15	803.67	-0.17	--	--	--	--	--	--	
06/27/07	11:07	14.44	831.38	42.05	803.77	-0.07	--	--	--	--	--	--	Mild coal-tar-like odor, black material on probe.
07/24/07	11:42	14.36	831.46	42.00	803.82	-0.02	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', reddish material on probe.
08/28/07	11:33	14.71	831.11	42.00	803.82	-0.02	--	--	--	--	--	--	Firm bottom, mild manure-like odor.
09/20/07	11:32	14.84	830.98	41.90	803.92	0.08	--	--	--	--	--	--	Firm bottom, brown material on probe (from water surface).
10/31/07	10:47	13.81	832.01	41.78	804.04	0.20	--	--	--	--	--	--	Firm bottom, coal-tar-like odor, VOCs = 0.4 ppm.
11/20/07	10:52	13.53	832.29	41.98	803.84	0.00	--	--	--	--	--	--	Strong coal-tar-like odor.
12/18/07	10:46	13.11	832.71	42.25	803.57	-0.27	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	NR	NR	NR	NR	NR	--	--	--	--	--	--	--	Could not open vault lid.
02/21/08	15:43	12.17	833.65	41.98	803.84	0.00	--	--	--	--	--	--	Soft bottom.
03/18/08	12:28	11.62	834.20	41.93	803.89	0.05	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, trace brown/black sticky coal-tar-like material on probe, bubbles on the water surface, brown slimy material on probe from water surface.
05/12/08	9:03	13.57	832.25	41.97	803.85	0.01	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
06/05/08	14:03	14.27	831.55	42.04	803.78	-0.06	--	--	--	--	--	--	Slightly soft.
07/08/08	9:32	14.71	831.11	42.07	803.75	-0.09	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.
08/06/08	9:38	14.24	831.58	41.95	803.87	0.03	--	--	--	--	--	--	Coal-tar-like odor.
11/19/08	10:53	14.19	831.63	41.97	803.85	0.01	--	--	--	--	--	--	
02/06/09	11:56	14.01	831.81	41.95	803.87	0.03	--	--	--	--	--	--	
05/29/09	12:45	13.55	832.27	42.00	803.82	-0.02	--	--	--	--	--	--	Firm bottom.
08/11/09	10:56	13.54	832.28	42.00	803.82	-0.02	--	--	--	--	--	--	Soft bottom, odor.
11/09/09	12:06	13.56	832.26	41.97	803.85	0.01	--	--	--	--	--	--	Firm bottom.
02/23/10	10:15	14.04	831.78	42.00	803.82	-0.02	--	--	--	--	--	--	0.0 ppm.
05/28/10	10:56	14.02	831.80	41.91	803.91	0.07	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	11:02	13.95	831.87	41.90	803.92	0.08	--	--	--	--	--	--	0.0 ppm.
11/23/10	11:27	13.36	832.46	41.91	803.91	0.07	--	--	--	--	--	--	Firm bottom.
02/28/11	11:50	13.53	832.29	42.00	803.82	-0.02	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	11:36	12.02	833.80	41.88	803.94	0.10	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/26/11	9:47	14.11	831.71	41.89	803.93	0.09	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
02/15/12	14:08	13.80	832.02	41.89	803.93	0.09	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/15/12	11:25	14.40	831.42	41.89	803.93	0.09	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/19/12	11:30	14.00	831.82	41.92	803.90	0.06	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	11:39	14.32	831.50	42.04	803.78	-0.06	--	--	--	--	--	--	Soft bottom.
05/16/14	9:40	13.42	832.40	41.99	803.83	-0.01	--	--	--	--	--	--	Firm bottom.
12/01/14	14:15	14.28	831.54	41.97	803.85	0.01	--	--	--	--	--	--	Firm bottom.
12/17/15	10:45	14.47	831.35	41.81	804.01	0.17	--	--	--	--	--	--	Firm bottom.
12/27/16	12:15	13.78	832.04	41.80	804.02	0.18	--	--	--	--	--	--	Firm bottom.
12/21/17	12:25	14.50	831.32	41.81	804.01	0.17	--	--	--	--	--	--	Firm bottom.

Top of Casing (FAMSL) = 845.82  
 Well bottom elev. (installed; FAMSL) = 803.84  
 Installed Well Depth (ft) = 41.98

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.
- FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-19										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	14:47	12.25	833.56	19.08	826.73	0.03	--	--	--	--	--	--	Soft bottom.
04/25/07	NR	11.63	834.18	16.16	829.65	2.95	--	--	--	--	--	--	Mild coal-tar-like odor. Depth to bottom measurement questionable.
05/30/07	NR	13.72	832.09	19.15	826.66	-0.04	--	--	--	--	--	--	Hard bottom, trace sediment on probe.
06/27/07	11:03	14.46	831.35	19.18	826.63	-0.07	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, black material on probe.
07/24/07	11:45	14.37	831.44	19.17	826.64	-0.06	--	--	--	--	--	--	Black material on probe, organic-like odor, trace coal-tar-like blebs on probe.
08/28/07	11:30	14.72	831.09	19.22	826.59	-0.11	--	--	--	--	--	--	Firm bottom, manure-like odor.
09/20/07	11:26	14.85	830.96	19.17	826.64	-0.06	--	--	--	--	--	--	Firm bottom, brown material on probe (from water surface), coal-tar-like odor, coal-tar-like material on probe.
10/31/07	10:43	13.83	831.98	19.16	826.65	-0.05	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor, VOCs = 0.9 ppm.
11/20/07	10:59	13.58	832.23	19.11	826.7	0.00	--	--	--	--	--	--	Strong coal-tar-like odor.
12/18/07	10:50	13.13	832.68	19.30	826.51	-0.19	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	NR	NR	NR	NR	NR	--	--	--	--	--	--	--	Could not open vault lid.
02/21/08	15:38	12.20	833.61	19.17	826.64	-0.06	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.
03/18/08	12:25	11.63	834.18	19.25	826.56	-0.14	--	--	--	--	--	--	Firm bottom, bubbles on the water surface.
05/12/08	9:05	13.59	832.22	19.21	826.60	-0.10	--	--	--	--	--	--	Firm bottom.
06/05/08	14:04	14.30	831.51	19.23	826.58	-0.12	--	--	--	--	--	--	Slightly soft.
07/08/08	9:35	14.72	831.09	19.22	826.59	-0.11	--	--	--	--	--	--	Firm bottom, coal-tar-like odor.
08/06/08	9:40	14.26	831.55	19.17	826.64	-0.06	--	--	--	--	--	--	Coal-tar-like odor.
11/19/08	10:54	14.21	831.60	19.10	826.71	0.01	--	--	--	--	--	--	
02/06/09	11:58	14.03	831.78	19.24	826.57	-0.13	--	--	--	--	--	--	
05/29/09	12:44	13.87	831.94	19.20	826.61	-0.09	--	--	--	--	--	--	Hard bottom.
08/11/09	11:00	13.56	832.25	19.19	826.62	-0.08	--	--	--	--	--	--	Firm bottom, odor.
11/09/09	12:07	13.57	832.24	19.15	826.66	-0.04	--	--	--	--	--	--	Firm bottom.
02/23/10	10:20	14.06	831.75	19.15	826.66	-0.04	--	--	--	--	--	--	0.0 ppm.
05/28/10	10:54	14.02	831.79	19.21	826.60	-0.10	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
08/30/10	11:00	13.99	831.82	19.50	826.31	-0.39	--	--	--	--	--	--	0.0 ppm.
11/23/10	11:29	13.41	832.40	19.28	826.53	-0.17	--	--	--	--	--	--	Firm bottom.
02/28/11	11:55	13.57	832.24	19.20	826.61	-0.09	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	11:34	12.01	833.80	19.22	826.59	-0.11	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
08/26/11	9:46	14.14	831.67	19.16	826.65	-0.05	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
02/15/12	14:07	13.82	831.99	19.16	826.65	-0.05	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
06/15/12	11:25	13.86	831.95	19.16	826.65	-0.05	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	11:35	14.05	831.76	19.15	826.66	-0.04	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	11:42	14.35	831.46	19.22	826.59	-0.11	--	--	--	--	--	--	Firm bottom.
05/16/14	9:44	13.45	832.36	19.18	826.63	-0.07	--	--	--	--	--	--	Firm bottom.
12/01/14	14:20	14.03	831.78	19.21	826.60	-0.10	--	--	--	--	--	--	Firm bottom.
12/17/15	10:44	14.47	831.34	19.11	826.70	0.00	--	--	--	--	--	--	Firm bottom.
12/27/16	12:17	13.77	832.04	19.20	826.61	-0.09	--	--	--	--	--	--	Firm bottom.
12/21/17	12:25	14.35	831.46	19.18	826.63	-0.07	--	--	--	--	--	--	Firm bottom.

Top of Casing (FAMSL) = 845.81  
 Well bottom elev. (installed; FAMSL) = 826.70  
 Installed Well Depth (ft) = 19.11

**Notes:**

1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well bottom elevations are approximate.
- FAMSL = Feet Above Mean Sea Level.  
 TOC = Top of Casing.  
 -- = NAPL not present.  
 NR = Not Recorded.

Table 1  
Barrier Wall Fluid-Level Monitoring

New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, New York

Date	Time	RECOVERY WELL RW-20										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	16:25	7.59	834.37	13.80	828.16	1.65	--	--	--	--	--	--	Soft bottom.
04/25/07	NR	6.88	835.08	13.90	828.06	1.55	--	--	--	--	--	--	Silty bottom.
05/30/07	NR	9.72	832.24	13.44	828.52	2.01	--	--	--	--	--	--	Soft bottom, entire probe covered with gray Silt, coal-tar-like odor.
06/27/07	8:57	10.50	831.46	13.68	828.28	1.77	--	--	--	--	--	--	Very Silty bottom, entire probe (6") covered in Silt.
07/24/07	10:13	10.18	831.78	15.33	826.63	0.12	--	--	--	--	--	--	Able to penetrate sediment in well 0.3', organic-like odor, soft bottom.
08/28/07	10:03	10.74	831.22	13.50	828.46	1.95	--	--	--	--	--	--	Approximately 4" of Silt on end of probe. Curb box settled, j-plug rim cracked.
09/20/07	9:35	10.98	830.98	13.58	828.38	1.87	--	--	--	--	--	--	Able to penetrate sediment in well 0.4', sediment on probe, coal- tar-like odor, coal-tar-like material on probe.
10/31/07	8:37	9.38	832.58	13.64	828.32	1.81	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor, VOCs = 0.0 ppm.
11/20/07	8:57	8.61	833.35	13.48	828.48	1.97	--	--	--	--	--	--	Coal-tar-like odor.
12/18/07	8:57	7.80	834.16	13.62	828.34	1.83	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	11:23	8.41	833.55	12.44	829.52	3.01	--	--	--	--	--	--	Soft bottom.
02/21/08	15:08	7.20	834.76	14.27	827.69	1.18	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
03/18/08	13:05	7.19	834.77	13.53	828.43	1.92	--	--	--	--	--	--	Mild coal-tar-like odor, trace sheen on sediment on probe. J-plug rim cracked due to curb box settling.
05/12/08	8:51	9.94	832.02	13.57	828.39	1.88	--	--	--	--	--	--	Sediment on probe, faint coal-tar-like odor.
06/05/08	11:43	10.62	831.34	15.40	826.56	0.05	--	--	--	--	--	--	Little gray sediment on probe.
07/08/08	8:21	10.96	831.00	13.85	828.11	1.60	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
08/06/08	8:36	10.47	831.49	13.85	828.11	1.60	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
11/19/08	8:21	9.91	832.05	15.39	826.57	0.06	--	--	--	--	--	--	Soft bottom, approximately 1.5' of sediment on probe, coal tar-like odor.
02/06/09	8:23	10.31	831.65	14.28	827.68	1.17	--	--	--	--	--	--	Soft bottom.
05/29/09	11:33	9.31	832.65	13.50	828.46	1.95	--	--	--	--	--	--	Soft bottom.
08/11/09	9:34	8.72	833.24	15.40	826.56	0.05	--	--	--	--	--	--	Very soft bottom, slight odor, 1.6' of sediment on probe.
11/09/09	10:56	9.28	832.68	14.75	827.21	0.70	--	--	--	--	--	--	Very soft bottom, 1' of gray sediment on probe.
02/23/10	8:39	10.12	831.84	15.57	826.39	-0.12	--	--	--	--	--	--	0.0 ppm.
05/28/10	11:20	10.26	831.70	14.83	827.13	0.62	--	--	--	--	--	--	Soft bottom, gray sediment on probe, 0.0 ppm.
08/30/10	9:15	9.89	832.07	13.95	828.01	1.50	--	--	--	--	--	--	Dark gray sediment on probe, soft bottom, 0.0 ppm.
11/23/10	10:41	9.31	832.65	14.62	827.34	0.83	--	--	--	--	--	--	Soft bottom.
02/28/11	8:58	8.99	832.97	13.98	827.98	1.47	--	--	--	--	--	--	Soft bottom, sediment on probe, 0.0 ppm.
06/02/11	10:32	7.36	834.60	13.70	828.26	1.75	--	--	--	--	--	--	Soft bottom, 0.0 ppm, sediment on probe.
08/26/11	8:50	10.07	831.89	13.48	828.48	1.97	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
02/15/12	12:06	10.01	831.95	13.36	828.60	2.09	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/15/12	11:25	10.10	831.86	15.40	826.56	0.05	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/19/12	11:10	10.09	831.87	14.98	826.98	0.47	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
11/26/13	11:00	10.22	831.74	15.10	826.86	0.35	--	--	--	--	--	--	Soft bottom.
05/16/14	8:13	9.33	832.63	13.18	828.78	2.27	--	--	--	--	--	--	Soft bottom.
12/01/14	13:10	9.59	832.37	13.94	828.02	1.51	--	--	--	--	--	--	Soft bottom.
12/17/15	10:35	10.16	831.80	13.09	828.87	2.36	--	--	--	--	--	--	Soft bottom.
12/27/16	10:56	9.41	832.55	14.85	827.11	0.60	--	--	--	--	--	--	Soft bottom.
12/21/17	8:25	10.40	831.56	15.15	826.81	0.30	--	--	--	--	--	--	Soft bottom, sediment on bottom of probe.

Top of Casing (FAMSL) 841.96  
Well bottom elev. (installed; FAMSL) = 826.51  
Installed Well Depth (ft) = 15.45

Notes:

- Elevations referenced to the NAVD 88 Datum.
- Surface elevation = the elevation of the vault lid or curb box lid.
- Used weighted measuring tape for depth to bottom starting on 7/24/07.

FAMSL = Feet Above Mean Sea Level.  
bmp = below measuring point.  
TOC = Top of Casing.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	RECOVERY WELL RW-21										Comments/Observations	
		Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	LNAPL			DNAPL			
							Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	
01/18/07	8:10	8.13	833.89	13.25	828.77	2.75	--	--	--	--	--	--	Soft bottom.
04/25/07	NR	7.54	834.48	15.30	826.72	0.70	--	--	--	--	--	--	Very Silty.
05/30/07	NR	9.80	832.22	14.38	827.64	1.62	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.
06/27/07	9:10	10.46	831.56	14.03	827.99	1.97	--	--	--	--	--	--	Silt on the last 3" of the probe.
07/24/07	10:17	10.00	832.02	14.79	827.23	1.21	--	--	--	--	--	--	Soft bottom, sediment on probe, trace sheen on probe, faint coal-tar-like odor.
08/28/07	10:13	10.95	831.07	14.20	827.82	1.80	--	--	--	--	--	--	Soft bottom, approximately 3" of Silt on end of probe, manure-like odor. Curb box settled, lid will not close completely.
09/20/07	9:39	10.98	831.04	14.11	827.91	1.89	--	--	--	--	--	--	Able to penetrate sediment in well 0.2', sediment on probe, coal-tar-like odor.
10/31/07	8:45	9.47	832.55	14.14	827.88	1.86	--	--	--	--	--	--	Able to penetrate sediment in well 0.2', mild coal-tar-like odor, VOCs = 0.0 ppm.
11/20/07	9:03	9.09	832.93	14.11	827.91	1.89	--	--	--	--	--	--	Coal-tar-like odor, sediment on probe.
12/18/07	9:16	9.17	832.85	13.95	828.07	2.05	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.
01/31/08	11:17	9.41	832.61	13.97	828.05	2.03	--	--	--	--	--	--	Soft bottom.
02/21/08	15:14	8.15	833.87	14.37	827.65	1.63	--	--	--	--	--	--	Soft bottom, mild coal-tar-like odor.
03/18/08	13:00	8.04	833.98	14.28	827.74	1.72	--	--	--	--	--	--	Soft bottom.
05/12/08	8:50	9.97	832.05	13.86	828.16	2.14	--	--	--	--	--	--	Soft bottom, sediment on probe.
06/05/08	11:52	10.85	831.17	16.09	825.93	-0.09	--	--	--	--	--	--	Well redeveloped on June 5th 2008.
07/08/08	8:30	11.13	830.89	16.09	825.93	-0.09	--	--	--	--	--	--	Firm bottom, sediment on probe.
08/06/08	8:42	10.66	831.36	15.85	826.17	0.15	--	--	--	--	--	--	
11/19/08	8:25	10.07	831.95	15.88	826.14	0.12	--	--	--	--	--	--	Approximately 1" of sediment on probe.
02/06/09	9:09	10.51	831.51	15.56	826.46	0.44	--	--	--	--	--	--	
05/29/09	11:41	9.14	832.88	15.87	826.15	0.13	--	--	--	--	--	--	Firm bottom, riser leaning to the west.
08/11/09	9:41	8.59	833.43	15.85	826.17	0.15	--	--	--	--	--	--	Soft bottom, 3" of gray sediment on probe, slight odor.
11/09/09	10:58	9.61	832.41	16.01	826.01	-0.01	--	--	--	--	--	--	Soft bottom.
02/23/10	8:43	10.31	831.71	16.07	825.95	-0.07	--	--	--	--	--	--	0.0 ppm.
05/28/10	11:15	10.41	831.61	15.75	826.27	0.25	--	--	--	--	--	--	Soft bottom, gray sediment on probe, 0.0 ppm.
08/30/10	9:23	10.09	831.93	15.75	826.27	0.25	--	--	--	--	--	--	Gray sediment on probe, coal tar-like odor, 0.0 ppm.
11/23/10	10:47	9.43	832.59	NR	-	-	--	--	--	--	--	--	Soft sediment.
02/28/11	9:16	9.39	832.63	15.72	826.30	0.28	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/02/11	10:40	9.02	833.00	15.82	826.20	0.18	--	--	--	--	--	--	Soft bottom, 0.0 ppm, sediment on probe.
08/26/11	8:55	10.56	831.46	15.83	826.19	0.17	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
02/15/12	12:16	10.08	831.94	15.95	826.07	0.05	--	--	--	--	--	--	Soft bottom, 0.0 ppm.
06/15/12	11:20	10.24	831.78	15.95	826.07	0.05	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/19/12	11:00	10.22	831.80	15.85	826.17	0.15	--	--	--	--	--	--	Firm bottom, 0.0 ppm.
11/26/13	10:55	10.46	831.56	15.65	826.37	0.35	--	--	--	--	--	--	Firm bottom.
05/16/14	8:17	9.54	832.48	15.77	826.25	0.23	--	--	--	--	--	--	Firm bottom.
12/01/14	13:15	10.15	831.87	15.71	826.31	0.29	--	--	--	--	--	--	Firm bottom.
12/17/15	10:32	10.37	831.65	15.72	826.30	0.28	--	--	--	--	--	--	Firm bottom.
12/27/16	10:59	9.64	832.38	15.79	826.23	0.21	--	--	--	--	--	--	Firm bottom.
12/21/17	8:46	10.66	831.36	15.81	826.21	0.19	--	--	--	--	--	--	Firm bottom, trace sediment on bottom of probe, faint coal tar-like odor.

Top of Casing (FAMSL) = 842.02  
Well bottom elev. (installed; FAMSL) = 826.02  
Installed Well Depth (ft) = 16.00

- Notes:**
- Elevations referenced to the NAVD 88 Datum.
  - Surface elevation = the elevation of the vault lid or curb box lid.
  - Used weighted measuring tape for depth to bottom starting on 7/24/07.
  - Well redeveloped on June 5th 2008.

FAMSL = Feet Above Mean Sea Level.  
bmp = below measuring point.  
TOC = Top of Casing.  
NR = Not Recorded.

**Table 1**  
**Barrier Wall Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, New York**

Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	RECOVERY WELL RW-22						Comments/Observations	
							LNAPL			DNAPL				
Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)									
01/18/07	8:04	8.02	833.95	49.12	792.85	3.08	--	--	--	--	--	--	Soft bottom.	
04/25/07	NR	7.45	834.52	47.60	794.37	4.60	--	--	--	--	--	--		
05/30/07	NR	9.83	832.14	47.60	794.37	4.60	--	--	--	--	--	--	Little Silt on probe, slight coal-tar-like odor.	
06/27/07	9:19	10.75	831.22	47.78	794.19	4.42	--	--	--	--	--	--		
07/24/07	10:20	10.28	831.69	48.98	792.99	3.22	--	--	--	--	--	--	Probe appeared to sink through 1' sediment, organic-like odor.	
08/28/07	10:16	10.92	831.05	47.75	794.22	4.45	--	--	--	--	--	--	Soft bottom, LEL = 9%, O <sub>2</sub> = 19.3ppm, VOC = 9.4ppm.	
09/20/07	9:45	10.97	831.00	48.75	793.22	3.45	--	--	--	--	--	--	Able to penetrate sediment in well 0.15'.	
10/31/07	8:52	9.53	832.44	47.68	794.29	4.52	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', mild coal-tar-like odor, VOCs = 0.9 ppm.	
11/20/07	9:09	9.19	832.78	47.82	794.15	4.38	--	--	--	--	--	--	Coal-tar-like odor.	
12/18/07	9:00	9.00	832.97	47.64	794.33	4.56	--	--	--	--	--	--	Able to penetrate sediment in well 0.1', coal-tar-like odor.	
01/31/08	11:16	9.22	832.75	47.65	794.32	4.55	--	--	--	--	--	--	Soft bottom.	
02/21/08	15:17	8.71	833.26	48.88	793.09	3.32	--	--	--	--	--	--	Soft bottom, manure-like odor.	
03/18/08	12:58	7.91	834.06	47.75	794.22	4.45	--	--	--	--	--	--	Soft bottom, coal-tar-like odor, black sediment on probe. Curb box has settled, tire tracks over and around curb box.	
05/12/08	8:45	9.99	831.98	48.01	793.96	4.19	--	--	--	--	--	--	Soft bottom, coal-tar-like odor.	
06/05/08	11:53	10.82	831.15	52.22	789.75	-0.02	--	--	--	--	--	--	Well redeveloped on June 5th 2008.	
07/08/08	8:31	11.03	830.94	51.87	790.10	0.33	--	--	--	--	--	--	Firm bottom, mild coal-tar-like odor.	
08/06/08	8:46	10.54	831.43	51.80	790.17	0.40	--	--	--	--	--	--	Coal-tar-like odor.	
11/19/08	8:27	10.02	831.95	52.19	789.78	0.01	--	--	--	--	--	--		
02/06/09	9:11	10.45	831.52	51.49	790.48	0.71	--	--	--	--	--	--		
05/29/09	11:42	9.10	832.87	51.90	790.07	0.30	--	--	--	--	--	--	Firm bottom, riser leaning toward the east.	
08/11/09	9:45	8.64	833.33	51.59	790.38	0.61	--	--	--	--	--	--	Soft bottom, slight odor.	
11/09/09	10:59	9.52	832.45	51.91	790.06	0.29	--	--	--	--	--	--	Firm bottom.	
02/23/10	8:45	10.18	831.79	51.75	790.22	0.45	--	--	--	--	--	--	0.0 ppm.	
05/28/10	11:19	10.31	831.66	51.74	790.23	0.46	--	--	--	--	--	--	Soft bottom, gray sediment on probe, 0.0 ppm.	
08/30/10	9:15	10.04	831.93	51.70	790.27	0.50	--	--	--	--	--	--	Soft bottom, dark gray sediment on probe, coal tar-like odor, 0.0 ppm.	
11/23/10	10:49	9.32	832.65	51.92	790.05	0.28	--	--	--	--	--	--	Soft bottom.	
02/28/11	9:18	9.27	832.70	51.75	790.22	0.45	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
06/02/11	10:43	8.76	833.21	51.72	790.25	0.48	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
08/26/11	8:56	10.42	831.55	51.68	790.29	0.52	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
02/15/12	12:25	9.97	832.00	51.70	790.27	0.50	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
06/15/12	11:22	10.09	831.88	51.70	790.27	0.50	--	--	--	--	--	--	Firm bottom, 0.0 ppm.	
11/19/12	10:55	10.10	831.87	51.70	790.27	0.50	--	--	--	--	--	--	Soft bottom, 0.0 ppm.	
11/26/13	10:54	10.37	831.60	51.31	790.66	0.89	--	--	--	--	--	--	Soft bottom.	
05/16/14	8:20	9.45	832.52	51.39	790.58	0.81	--	--	--	--	--	--	Soft bottom.	
12/01/14	13:17	10.05	831.92	51.30	790.67	0.90	--	--	--	--	--	--	Soft bottom.	
12/17/15	10:30	10.28	831.69	51.45	790.52	0.75	--	--	--	--	--	--	Soft bottom.	
12/27/16	11:00	9.60	832.37	51.68	790.29	0.52	--	--	--	--	--	--	Soft bottom.	
12/21/17	8:47	10.50	831.47	51.94	790.03	0.26	--	--	--	--	--	--	Firm bottom, 1.0' of sediment on bottom of probe.	

Top of Casing (FAMSL) = 841.97  
 Well bottom elev. (installed; FAMSL) = 789.77  
 Installed Well Depth (ft) = 52.20

- Notes:**
1. Elevations referenced to the NAVD 88 Datum.
  2. Surface elevation = the elevation of the vault lid or curb box lid.
  3. Used weighted measuring tape for depth to bottom starting on 7/24/07.
  4. Well redeveloped on June 5th 2008.

FAMSL = Feet Above Mean Sea Level.  
 bmp = below measuring point.  
 TOC = Top of Casing.  
 NR = Not Recorded.

**Table 2**  
**Offsite Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, NY**

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	11/24/2004				1/28/2005				8/9/2007			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft-TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft-TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	17.43	24.86	--	--	15.8	24.65	--	--	18.09	24.83	--	--
MW01-07R	848.10	108.02	16.47	100+	--	--	14.6	108.65	--	--	16.70	+100	--	--
NMW-1	849.10	43.45	14.38	40.35	--	--	15.87	40.35	--	--	18.01	40.05	--	--
NMW-2	846.19	43.73	14.47	42.66	--	--	NA	NA	--	--	15.10	42.78	--	--
PZ01-02	841.46	20.60	10.03	20.58	10.00	0.03	8.31	20.6	8.28	0.03	10.57	17.40	--	--
PZ03-01D	847.49	46.39	15.78	46.72	--	--	14.17	46.5	--	--	16.39	46.70	--	--
PZ03-02A	845.96	15.76	14.08	15.35	--	--	12.25	15.1	--	--	Dry	14.67	--	--
PZ03-02D	845.97	55.27	14.28	54.72	--	--	12.35	54.5	--	--	14.82	54.13	--	--
PZ03-03A	843.50	10.64	10.71	10.96	--	--	10.15	10.9	--	--	8.68	8.68	--	--
PZ03-03B	843.53	23.67	11.78	22.2	--	--	10.1	22.1	--	--	12.51	21.90	--	--
PZ03-03D	843.59	49.73	11.89	49.41	--	--	NA	NA	--	--	12.56	48.10	--	--
PZ03-04A	842.76	14.62	10.33	14.60	--	--	9.25	14.60	--	--	10.97	14.60	--	--
PZ03-04B	842.68	21.54	10.96	22.06	--	--	9.52	22.06	--	--	11.70	21.19	--	--
PZ03-04D	842.75	41.61	11.07	41.62	--	--	9.46	41.60	--	--	11.75	41.50	--	--
PZ03-05A	842.37	12.69	10.64	12.38	--	--	9.23	12.35	--	--	6.20	6.20	--	--
PZ03-05B	842.32	16.69	10.66	15.92	--	--	9.33	15.95	--	--	11.42	15.76	--	--
PZ03-05C	842.40	27.72	10.75	27.59	--	--	9.15	27.60	--	--	11.48	24.67	--	--
PZ03-05D	842.37	44.69	10.61	44.80	--	--	9.93	44.80	--	--	9.85	33.74	--	--
PZ03-06A	841.80	11.65	9.70	11.51	--	--	8.27	11.50	--	--	10.30	11.50	--	--
PZ03-06B	841.75	18.60	10.31	18.05	10.30	0.01	8.75	18.00	8.53	0.22	10.85	17.81	10.76	0.09
PZ03-06C	841.72	32.65	10.25	32.68	--	--	6.07	32.65	--	--	11.00	31.90	--	--
PZ03-06D	841.66	51.09	5.90	51.00	--	--	8.55	51.00	--	--	7.01	50.98	--	--
PZ03-07A	841.17	10.67	8.85	10.50	--	--	7.50	10.50	--	--	8.61	10.35	--	--
PZ03-07B	841.08	16.58	9.31	16.67	--	--	7.68	16.70	--	--	10.00	16.26	--	--
PZ03-07C	841.00	30.57	9.46	32.85	--	--	7.80	32.85	--	--	10.10	31.20	--	--
PZ03-07D	841.07	55.14	9.50	52.90	--	--	7.80	52.90	--	--	10.23	52.76	--	--
PZ03-08A	840.87	11.59	9.89	11.45	--	--	7.10	11.45	--	--	9.28	10.97	--	--
PZ03-08B	840.87	17.59	9.08	18.68	--	--	7.45	18.65	--	--	9.75	17.35	--	--
PZ03-08C	840.91	30.63	9.15	30.65	--	--	7.50	30.65	--	--	9.84	30.27	--	--
PZ03-08D	840.87	55.59	9.12	54.68	--	--	7.50	54.70	--	--	9.81	55.22	--	--
PZ03-09A	850.95	22.76	19.47	47.17	--	--	18.00	21.50	--	--	NA	NA	--	--
PZ03-09D	850.78	47.59	19.12	47.17	--	--	17.54	47.00	--	--	NA	NA	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, NY**

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	3/18/2008				11/19/2008				5/29/2009			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	15.21	24.81	--	--	17.32	24.90	--	--	16.65	24.92	--	--
MW01-07R	848.10	108.02	13.71	108.79	--	--	16.37	109.02	--	--	15.48	110.00	--	--
NMW-1	849.10	43.45	15.70	40.03	--	--	18.20	40.52	--	--	17.58	40.40	--	--
NMW-2	846.19	43.73	12.26	42.75	--	--	14.59	42.95	--	--	13.94	43.02	--	--
PZ01-02	841.46	20.60	7.68	17.25	7.57	0.11	9.70	17.30	9.61	0.09	9.49	17.29	8.71	0.78
PZ03-01D	847.49	46.39	13.55	46.76	--	--	15.88	46.76	--	--	15.23	46.69	--	--
PZ03-02A	845.96	15.76	11.78	14.70	--	--	13.02	14.80	--	--	11.93	14.80	--	--
PZ03-02D	845.97	55.27	12.00	54.10	--	--	13.09	54.17	--	--	13.60	54.18	--	--
PZ03-03A	843.50	10.64	8.67	8.67	--	--	8.73	8.73	--	--	8.70	8.70	--	--
PZ03-03B	843.53	23.67	9.65	21.21	--	--	11.81	21.91	--	--	11.02	20.92	--	--
PZ03-03D	843.59	49.73	9.69	48.05	--	--	11.86	48.04	--	--	11.08	48.03	--	--
PZ03-04A	842.76	14.62	8.12	14.38	--	--	10.81	14.43	--	--	10.06	14.46	--	--
PZ03-04B	842.68	21.54	8.82	21.21	--	--	11.12	21.22	--	--	10.72	21.21	--	--
PZ03-04D	842.75	41.61	8.91	41.18	--	--	10.97	41.24	--	--	10.12	41.30	--	--
PZ03-05A	842.37	12.69	Dry	6.20	--	--	6.18	6.18	--	--	6.20	6.20	--	--
PZ03-05B	842.32	16.69	8.11	15.70	--	--	8.69	15.75	--	--	10.12	15.71	--	--
PZ03-05C	842.40	27.72	7.78	24.70	--	--	10.75	24.69	--	--	10.00	24.72	--	--
PZ03-05D	842.37	44.69	5.89	33.75	--	--	11.11	33.75	--	--	9.61	33.79	--	--
PZ03-06A	841.80	11.65	6.92	11.46	--	--	10.08	11.52	10.01	0.07	9.32	11.50	--	--
PZ03-06B	841.75	18.60	8.40	17.25	8.26	0.14	10.91	16.88	10.78	0.13	9.81	16.90	8.19	1.62
PZ03-06C	841.72	32.65	8.14	31.75	--	--	9.92	31.70	--	--	9.02	31.72	--	--
PZ03-06D	841.66	51.09	6.07	50.95	--	--	7.62	51.03	--	--	7.93	51.00	--	--
PZ03-07A	841.17	10.67	6.42	10.38	--	--	9.16	10.33	--	--	8.60	10.35	--	--
PZ03-07B	841.08	16.58	7.38	16.22	--	--	9.14	16.27	--	--	8.22	16.25	--	--
PZ03-07C	841.00	30.57	7.23	30.90	--	--	8.93	30.89	--	--	8.61	30.95	--	--
PZ03-07D	841.07	55.14	7.31	52.62	--	--	9.12	52.70	--	--	9.07	52.56	--	--
PZ03-08A	840.87	11.59	6.39	10.98	--	--	8.84	10.95	--	--	8.12	11.00	--	--
PZ03-08B	840.87	17.59	6.91	17.40	--	--	8.93	17.34	--	--	7.98	17.42	--	--
PZ03-08C	840.91	30.63	6.98	30.30	--	--	8.92	30.30	--	--	8.93	30.36	--	--
PZ03-08D	840.87	55.59	6.98	55.00	--	--	9.01	54.85	--	--	8.11	55.01	--	--
PZ03-09A	850.95	22.76	17.43	21.80	--	--	19.40	21.84	--	--	18.77	21.78	--	--
PZ03-09D	850.78	47.59	16.91	47.13	--	--	19.21	47.17	--	--	18.59	46.97	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, NY

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	11/9/2009				5/28/2010				11/23/2010			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	16.91	24.82	--	--	17.67	24.82	--	--	16.69	24.81	--	--
MW01-07R	848.10	108.02	15.48	110.00	--	--	15.82	108.80	--	--	15.51	108.80	--	--
NMW-1	849.10	43.45	17.67	40.35	--	--	18.24	40.31	--	--	17.26	40.31	--	--
NMW-2	846.19	43.73	14.17	42.80	--	--	15.64	42.70	--	--	13.85	42.76	--	--
PZ01-02	841.46	20.60	9.65	17.30	9.20	0.45	10.21	17.28	9.54	0.67	8.91	17.29	8.86	0.05
PZ03-01D	847.49	46.39	15.37	46.72	--	--	15.94	46.62	--	--	15.16	46.68	--	--
PZ03-02A	845.96	15.76	13.59	14.75	--	--	14.18	14.70	--	--	13.11	14.79	--	--
PZ03-02D	845.97	55.27	13.83	54.16	--	--	14.52	54.12	--	--	13.56	54.13	--	--
PZ03-03A	843.50	10.64	8.79	8.79	--	--	DRY	8.72	--	--	DRY	8.79	--	--
PZ03-03B	843.53	23.67	10.79	21.90	--	--	12.08	21.88	--	--	11.18	21.88	--	--
PZ03-03D	843.59	49.73	11.38	48.02	--	--	12.13	48.00	--	--	11.19	48.03	--	--
PZ03-04A	842.76	14.62	10.08	14.42	--	--	10.78	14.45	--	--	9.64	14.45	--	--
PZ03-04B	842.68	21.54	10.49	21.19	--	--	11.29	21.21	--	--	10.26	21.21	--	--
PZ03-04D	842.75	41.61	10.53	41.32	--	--	11.33	41.30	--	--	10.32	41.35	--	--
PZ03-05A	842.37	12.69	6.20	6.20	--	--	6.18	6.18	--	--	9.79	NA	--	--
PZ03-05B	842.32	16.69	9.78	15.75	--	--	10.94	15.75	--	--	10.37	15.81	--	--
PZ03-05C	842.40	27.72	9.92	24.64	--	--	10.81	24.75	--	--	9.75	24.67	--	--
PZ03-05D	842.37	44.69	9.23	33.80	--	--	9.81	33.75	--	--	9.26	32.47	--	--
PZ03-06A	841.80	11.65	9.38	11.50	9.32	0.06	9.97	11.47	--	--	9.25	11.51	9.07	0.18
PZ03-06B	841.75	18.60	9.71	16.80	9.51	0.20	11.32	16.45	10.32	1.00	12.60	16.76	12.45	0.15
PZ03-06C	841.72	32.65	9.59	31.69	--	--	10.62	31.60	--	--	9.34	31.61	--	--
PZ03-06D	841.66	51.09	8.41	50.80	--	--	9.07	50.90	--	--	8.56	50.42	--	--
PZ03-07A	841.17	10.67	8.27	10.35	--	--	8.72	10.32	--	--	8.31	10.35	--	--
PZ03-07B	841.08	16.58	8.72	16.24	--	--	9.69	16.25	--	--	8.57	16.28	--	--
PZ03-07C	841.00	30.57	7.88	30.92	--	--	9.38	30.87	--	--	7.78	30.91	--	--
PZ03-07D	841.07	55.14	8.83	52.75	--	--	9.48	52.60	--	--	8.47	52.61	--	--
PZ03-08A	840.87	11.59	8.27	11.00	--	--	9.00	10.98	--	--	8.09	10.98	--	--
PZ03-08B	840.87	17.59	8.42	17.40	--	--	9.32	17.37	--	--	8.24	17.41	--	--
PZ03-08C	840.91	30.63	8.02	30.30	--	--	9.28	30.30	--	--	7.98	30.29	--	--
PZ03-08D	840.87	55.59	8.44	54.95	--	--	9.48	54.80	--	--	8.26	54.86	--	--
PZ03-09A	850.95	22.76	18.97	21.71	--	--	19.63	21.70	--	--	18.76	21.81	--	--
PZ03-09D	850.78	47.59	18.69	46.90	--	--	19.27	46.95	--	--	18.48	47.03	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, NY

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	6/2/2011				2/15/2012				6/15/2012			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	15.91	24.89	--	--	15.35	NA	--	--	17.42	24.85	--	--
MW01-07R	848.10	108.02	14.32	100.00 +	--	--	NA	NA	--	--	15.92	NA	--	--
NMW-1	849.10	43.45	16.37	40.39	--	--	17.94	40.33	--	--	18.12	40.35	--	--
NMW-2	846.19	43.73	12.82	42.72	--	--	14.34	42.64	--	--	14.52	42.76	--	--
PZ01-02	841.46	20.60	8.34	17.22	7.87	0.47	10.05	17.15	--	trace	9.92	17.21	9.85	0.07
PZ03-01D	847.49	46.39	14.00	46.67	--	--	15.67	36.66	--	--	15.85	46.75	--	--
PZ03-02A	845.96	15.76	12.07	14.75	--	--	13.86	14.72	--	--	12.47	14.77	--	--
PZ03-02D	845.97	55.27	11.78	54.12	--	--	14.03	54.11	--	--	14.09	54.11	--	--
PZ03-03A	843.50	10.64	DRY	8.42	--	--	8.65	8.65	--	--	dry	8.74	--	--
PZ03-03B	843.53	23.67	10.58	21.87	--	--	11.66	21.86	--	--	11.84	21.88	--	--
PZ03-03D	843.59	49.73	10.61	47.98	--	--	11.73	48.00	--	--	11.89	48.07	--	--
PZ03-04A	842.76	14.62	9.43	14.44	--	--	9.76	14.43	--	--	10.20	14.48	--	--
PZ03-04B	842.68	21.54	9.88	21.22	--	--	10.82	21.20	--	--	11.02	21.29	--	--
PZ03-04D	842.75	41.61	9.88	41.32	--	--	10.87	41.35	--	--	11.07	41.43	--	--
PZ03-05A	842.37	12.69	0.80	6.98	--	--	5.68	6.86	--	--	0.65	6.87	--	--
PZ03-05B	842.32	16.69	8.68	15.79	--	--	10.51	15.73	--	--	10.68	15.91	--	--
PZ03-05C	842.40	27.72	9.11	24.67	--	--	10.64	24.60	--	--	10.82	24.66	--	--
PZ03-05D	842.37	44.69	8.32	33.43	--	--	10.75	32.47	--	--	10.24	32.51	--	--
PZ03-06A	841.80	11.65	8.33	11.50	--	--	9.71	11.51	--	--	9.94	11.54	--	trace
PZ03-06B	841.75	18.60	9.46	16.64	8.92	0.54	10.20	16.64	10.00	0.20	10.21	16.77	10.11	0.10
PZ03-06C	841.72	32.65	9.49	31.48	--	--	10.27	32.29	--	--	10.20	31.29	--	--
PZ03-06D	841.66	51.09	6.04	50.94	--	--	3.94	50.91	--	--	4.66	51.02	--	--
PZ03-07A	841.17	10.67	7.79	10.37	--	--	8.43	10.25	--	--	8.83	10.36	--	--
PZ03-07B	841.08	16.58	8.13	16.25	--	--	9.16	15.21	--	--	9.30	16.26	--	--
PZ03-07C	841.00	30.57	7.99	30.92	--	--	9.57	30.86	--	--	1.02	30.84	--	--
PZ03-07D	841.07	55.14	8.78	52.53	--	--	9.71	52.00	--	--	9.54	52.28	--	--
PZ03-08A	840.87	11.59	7.69	11.00	--	--	8.42	10.98	--	--	8.81	11.02	--	--
PZ03-08B	840.87	17.59	8.03	17.42	--	--	8.87	17.44	--	--	9.02	17.45	--	--
PZ03-08C	840.91	30.63	8.02	30.30	--	--	8.97	30.31	--	--	9.06	30.34	--	--
PZ03-08D	840.87	55.59	8.09	54.72	--	--	9.41	55.03	--	--	9.17	55.10	--	--
PZ03-09A	850.95	22.76	18.11	21.66	--	--	19.31	21.67	--	--	18.44	21.75	--	--
PZ03-09D	850.78	47.59	17.49	47.03	--	--	18.99	46.86	--	--	19.16	47.08	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, NY**

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	11/20/2012				5/31/2013				11/26/2013			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	17.44	24.82	--	--	15.47	-	--	--	17.61	24.82	--	--
MW01-07R	848.10	108.02	16.06	108.92	--	--	15.20	-	--	--	16.38	108.92	--	--
NMW-1	849.10	43.45	18.14	40.29	--	--	16.75	40.30	--	--	18.39	40.37	--	--
NMW-2	846.19	43.73	14.54	42.91	--	--	13.02	42.65	--	--	14.78	42.78	--	--
PZ01-02	841.46	20.60	10.00	NA	9.85	0.15	8.30	-	8.29	0.01	10.11	17.21	10.03	0.08
PZ03-01D	847.49	46.39	15.85	46.75	--	--	14.34	46.72	--	--	16.09	46.77	--	--
PZ03-02A	845.96	15.76	13.74	14.82	--	--	12.25	14.80	--	--	14.20	14.74	--	--
PZ03-02D	845.97	55.27	14.17	54.23	--	--	13.35	54.17	--	--	14.46	54.23	--	--
PZ03-03A	843.50	10.64	8.72	8.72	--	--	dry	8.70	--	--	dry	8.70	--	--
PZ03-03B	843.53	23.67	11.86	21.91	--	--	9.62	21.86	--	--	12.07	21.88	--	--
PZ03-03D	843.59	49.73	10.91	48.05	--	--	9.64	48.00	--	--	12.15	48.10	--	--
PZ03-04A	842.76	14.62	10.39	14.51	--	--	9.15	14.47	--	--	10.98	14.48	--	--
PZ03-04B	842.68	21.54	10.69	21.22	--	--	8.89	21.25	--	--	10.78	21.25	--	--
PZ03-04D	842.75	41.61	11.06	41.44	--	--	8.54	41.40	--	--	11.27	41.43	--	--
PZ03-05A	842.37	12.69	2.78	6.82	--	--	-	-	--	--	1.48	6.72	--	--
PZ03-05B	842.32	16.69	10.69	15.88	--	--	7.65	14.20	--	--	0.62	10.07	--	--
PZ03-05C	842.40	27.72	10.69	24.69	--	--	8.15	24.66	--	--	10.65	24.68	--	--
PZ03-05D	842.37	44.69	10.45	32.53	--	--	9.55	32.47	--	--	10.38	32.52	--	--
PZ03-06A	841.80	11.65	9.90	NA	9.88	0.02	8.36	11.54	-	trace	10.12	11.54	--	trace
PZ03-06B	841.75	18.60	10.18	16.73	10.06	0.12	7.75	16.65	--	--	10.38	16.68	10.26	0.12
PZ03-06C	841.72	32.65	10.15	31.29	--	--	6.97	31.24	--	--	10.41	31.19	--	--
PZ03-06D	841.66	51.09	6.23	51.01	--	--	6.68	50.97	--	--	4.25	50.95	--	--
PZ03-07A	841.17	10.67	8.33	10.42	--	--	7.67	10.38	--	--	8.95	10.41	--	--
PZ03-07B	841.08	16.58	9.32	16.26	--	--	6.26	16.42	--	--	9.56	16.27	--	--
PZ03-07C	841.00	30.57	9.57	30.82	--	--	6.35	30.61	--	--	8.42	30.49	--	--
PZ03-07D	841.07	55.14	9.64	52.19	--	--	8.10	52.10	--	--	4.55	51.23	--	--
PZ03-08A	840.87	11.59	8.46	11.03	--	--	6.91	11.00	--	--	8.69	11.02	--	--
PZ03-08B	840.87	17.59	9.06	17.46	--	--	6.04	17.40	--	--	9.29	17.42	--	--
PZ03-08C	840.91	30.63	9.13	30.35	--	--	6.01	30.31	--	--	9.48	30.34	--	--
PZ03-08D	840.87	55.59	9.13	54.83	--	--	6.40	54.55	--	--	9.56	54.35	--	--
PZ03-09A	850.95	22.76	19.46	21.95	--	--	17.67	21.67	--	--	19.63	21.69	--	--
PZ03-09D	850.78	47.59	19.17	47.02	--	--	17.78	46.98	--	--	19.41	47.01	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, NY

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	12/2/2014				12/4/2014 (Post-Redevelopment)				12/17/2015			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	17.10	24.85	--	--	--	28.80	--	--	NA	NA	--	--
MW01-07R	848.10	108.02	16.17	108.91	--	--	--	108.78	--	--	NA	NA	--	--
NMW-1	849.10	43.45	18.11	40.36	--	--	--	47.14	--	--	18.45	42.20	--	--
NMW-2	846.19	43.73	13.49	42.71	--	--	--	43.08	--	--	14.79	43.33	--	--
PZ01-02	841.46	20.60	9.40	17.05	--	trace blebs	9.18	20.46	--	trace blebs	9.90	17.21	9.89	0.01
PZ03-01D	847.49	46.39	15.76	46.77	--	--	--	47.20	--	--	14.67	46.77	--	--
PZ03-02A	845.96	15.76	13.30	14.84	--	--	--	15.65	--	--	14.52	15.54	--	--
PZ03-02D	845.97	55.27	14.11	54.24	--	--	--	55.00	--	--	14.44	54.90	--	--
PZ03-03A	843.50	10.64	DRY	8.73	--	--	--	11.14	--	--	dry	11.12	--	--
PZ03-03B	843.53	23.67	11.57	21.91	--	--	--	23.79	--	--	12.00	23.78	--	--
PZ03-03D	843.59	49.73	11.65	48.08	--	--	--	49.63	--	--	12.15	49.64	--	--
PZ03-04A	842.76	14.62	9.89	14.49	--	--	9.64	14.65	--	--	10.95	14.56	--	--
PZ03-04B	842.68	21.54	10.83	21.18	--	--	10.46	22.08	--	--	11.11	22.00	--	--
PZ03-04D	842.75	41.61	10.84	41.33	--	--	10.54	41.59	--	--	11.18	41.51	--	--
PZ03-05A	842.37	12.69	0.82	6.15	--	--	1.30	7.16	--	--	dry	7.12	--	--
PZ03-05B	842.32	16.69	-	-	--	--	10.04	16.76	--	--	10.73	16.72	--	--
PZ03-05C	842.40	27.72	10.47	24.68	--	--	10.16	27.68	--	--	10.83	27.67	--	--
PZ03-05D	842.37	44.69	10.47	32.55	--	--	10.04	44.75	--	--	10.80	44.67	--	--
PZ03-06A	841.80	11.65	9.76	11.51	--	--	9.46	18.32	--	--	10.23	11.77	--	--
PZ03-06B	841.75	18.60	9.76	9.76	--	trace blebs	9.50	11.86	--	trace blebs	10.20	18.58	10.20	trace
PZ03-06C	841.72	32.65	9.79	31.14	--	--	9.36	32.68	--	--	10.10	32.64	--	--
PZ03-06D	841.66	51.09	0.31	50.99	--	--	9.16	53.21	--	--	10.02	53.08	--	--
PZ03-07A	841.17	10.67	8.91	10.44	--	--	8.57	10.75	--	--	9.42	10.70	--	--
PZ03-07B	841.08	16.58	8.86	16.28	--	--	8.71	16.66	--	--	9.42	16.59	--	--
PZ03-07C	841.00	30.57	0.60	29.48	--	--	8.64	32.66	--	--	9.35	32.60	--	--
PZ03-07D	841.07	55.14	0.60	48.99	--	--	8.68	51.58	--	--	9.39	51.51	--	--
PZ03-08A	840.87	11.59	8.66	10.99	--	--	8.48	11.81	--	--	9.09	11.76	--	--
PZ03-08B	840.87	17.59	8.65	17.43	--	--	8.49	17.80	--	--	9.17	17.70	--	--
PZ03-08C	840.91	30.63	8.67	30.33	--	--	8.65	30.62	--	--	9.17	30.56	--	--
PZ03-08D	840.87	55.59	7.72	54.20	--	--	8.46	55.68	--	--	9.13	55.55	--	--
PZ03-09A	850.95	22.76	19.19	21.75	--	--	--	22.46	--	--	NA	NA	--	--
PZ03-09D	850.78	47.59	19.12	46.98	--	--	--	47.58	--	--	NA	NA	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

**New York State Electric & Gas Corporation**  
**Binghamton Court Street Former MGP Site**  
**Binghamton, NY**

Well ID	Measuring Point Elevation (ft AMSL)	Installed Well Depth (ft-TIC)	12/27/2016				12/21/2017			
			DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	848.93	NA	16.91	29.83	--	--	5.77	25.86	--	--
MW01-07R	848.10	108.02	16.20	108.80	--	--	3.97	108.80	--	--
NMW-1	849.10	43.45	17.78	41.00	--	--	3.54	41.05	--	--
NMW-2	846.19	43.73	14.13	43.35	--	--	6.32	43.36	--	--
PZ01-02	841.46	20.60	10.60	20.34	8.90	1.70	8.94	NM	8.89	0.05
PZ03-01D	847.49	46.39	15.44	46.69	--	--	2.95	46.69	--	--
PZ03-02A	845.96	15.76	NA	NA	--	--	NA	NA	--	--
PZ03-02D	845.97	55.27	NA	NA	--	--	NA	NA	--	--
PZ03-03A	843.50	10.64	dry	11.07	--	--	dry	11.11	--	--
PZ03-03B	843.53	23.67	11.30	23.78	--	--	12.21	23.78	--	--
PZ03-03D	843.59	49.73	11.64	49.62	--	--	12.31	49.63	--	--
PZ03-04A	842.76	14.62	10.04	14.58	--	--	11.11	14.58	--	--
PZ03-04B	842.68	21.54	10.42	21.99	--	--	11.36	22.00	--	--
PZ03-04D	842.75	41.61	11.55	41.60	--	--	11.44	41.48	--	--
PZ03-05A	842.37	12.69	dry	7.19	--	--	dry	7.10	--	--
PZ03-05B	842.32	16.69	10.02	16.71	--	--	11.04	16.72	--	--
PZ03-05C	842.40	27.72	10.15	27.68	--	--	11.12	27.67	--	--
PZ03-05D	842.37	44.69	10.20	44.67	--	--	11.08	44.69	--	--
PZ03-06A	841.80	11.65	NA	NA	--	--	NA	NA	--	--
PZ03-06B	841.75	18.60	NA	NA	--	--	NA	NA	--	--
PZ03-06C	841.72	32.65	NA	NA	--	--	NA	NA	--	--
PZ03-06D	841.66	51.09	NA	NA	--	--	NA	NA	--	--
PZ03-07A	841.17	10.67	8.02	10.69	--	--	8.47	10.70	--	--
PZ03-07B	841.08	16.58	8.72	16.61	--	--	9.66	16.59	--	--
PZ03-07C	841.00	30.57	8.70	32.59	--	--	9.68	32.58	--	--
PZ03-07D	841.07	55.14	8.95	51.52	--	--	9.72	51.52	--	--
PZ03-08A	840.87	11.59	7.80	11.77	--	--	8.84	11.76	--	--
PZ03-08B	840.87	17.59	8.55	17.70	--	--	9.42	17.72	--	--
PZ03-08C	840.91	30.63	8.65	30.54	--	--	9.46	30.55	--	--
PZ03-08D	840.87	55.59	9.17	55.55	--	--	9.46	55.56	--	--
PZ03-09A	850.95	22.76	19.05	22.43	--	--	13.82	NA	--	--
PZ03-09D	850.78	47.59	18.82	47.57	--	--	19.54	47.59	--	--

See Notes on Page 8.

**Table 2**  
**Offsite Fluid-Level Monitoring**

**New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, NY**



**Notes:**

1. All elevations referenced to feet above mean sea level, North American Vertical Datum of 1988.
2. Ground surface elevation is approximate. City of Binghamton re-surfaced Court Street in 2008. The surveyed points are from 2007 before the road was re-surfaced.
3. Installed well depth taken from field geologist notes.
4. Sediment and debris was removed from all road wells on 12/3-12/4/14 by jetting with potable water.
5. Piezometer clusters PZ03-02 (A, D) and PZ03-06 (A, B, C, D) were observed to be paved over during the 2016 NAPL monitoring event.

**Table 3**  
**DNAPL Monitoring Summary - MW93-06D**



Design & Consultancy  
for natural and  
built assets

New York State Electric & Gas Corporation  
Binghamton Court Street Former MGP Site  
Binghamton, NY

Well ID	Date	Time	Depth to Water (ft btoc)	Depth to Top of DNAPL (ft)	Measured Well Depth (ft-btoc)	Approx. DNAPL Thickness (ft)	Approx. Volume DNAPL Removed (gallons)
MW93-06D	7/14/09	13:00	13.95	60.72	62.62	1.90	0.00
	8/6/09	12:30	14.07	60.49	62.64	2.15	0.30
	8/11/09	13:30	14.04	62.03	62.63	0.60	0.05
	8/20/09	9:52	14.39	62.03	62.63	0.60	0.10
	9/9/09	9:19	14.45	62.19	62.64	0.45	0.07
	9/18/09	NA	NG	62.44	62.64	0.20	0.00
	9/28/09	11:30	NG	62.29	62.64	0.35	0.06
	11/9/09	NA	13.92	-	62.65	trace	0.00
	11/23/09	11:30	NG	61.94	62.64	0.70	0.10
	2/23/10	10:40	14.34	62.05	62.75	0.70	0.03
	6/23/10	13:00	14.48	61.49	62.64	1.15	0.20
	8/30/10	11:20	14.38	60.48	62.20	1.72	0.30
	11/23/10	11:40	13.74	60.96	62.63	1.67	0.30
	2/28/11	12:15	14.00	61.82	62.62	0.80	0.10
	6/2/11	11:50	12.09	61.32	62.62	1.30	0.25
	8/26/11	10:15	14.30	61.24	62.64	1.40	0.25
	12/22/11	Monitoring well MW93-6D decommissioned prior to the 66-inch storm sewer rehabilitation					
	7/26/12	Monitoring well MW93-6D reinstalled and developed following rehabilitation of the 66-inch storm sewer					
	7/27/12	10:00	13.96	-	67.25	0.00	0.00
	11/19/12	10:10	13.96	-	67.30	0.00	0.00
	2/26/13	8:30	-	-	67.30	0.00	0.00
	5/29/13	Monitoring well MW93-6D redeveloped as per NYSDEC request					
	5/30/13	10:05	13.45	-	67.30	0.00	0.00
	7/1/13	11:00	-	-	67.27	0.00	0.00
	1/16/14	13:55	12.80	-	67.28	0.00	0.00
	5/16/14	NR	13.36	-	67.29	0.00	0.00
	12/1/14	NR	14.32	-	67.03	0.00	0.00
	12/17/15	11:30	14.48	-	67.15	0.00	0.00
	12/27/16	8:30	13.77	-	67.25	0.00	0.00
	12/21/17	12:40	14.48	-	67.29	0.00	0.00
Cumulative Volume of DNAPL Removed at MW93-06D =							2.11

**Notes:**

Replacement well MW93-6D installed on 7/26/12 contains a 5 ft sump. Original well MW93-6D did not contain a sump.

Well MW93-6D redeveloped on May 29, 2013 as per NYSDEC request. Approximately 50 gallons of water were removed during development.

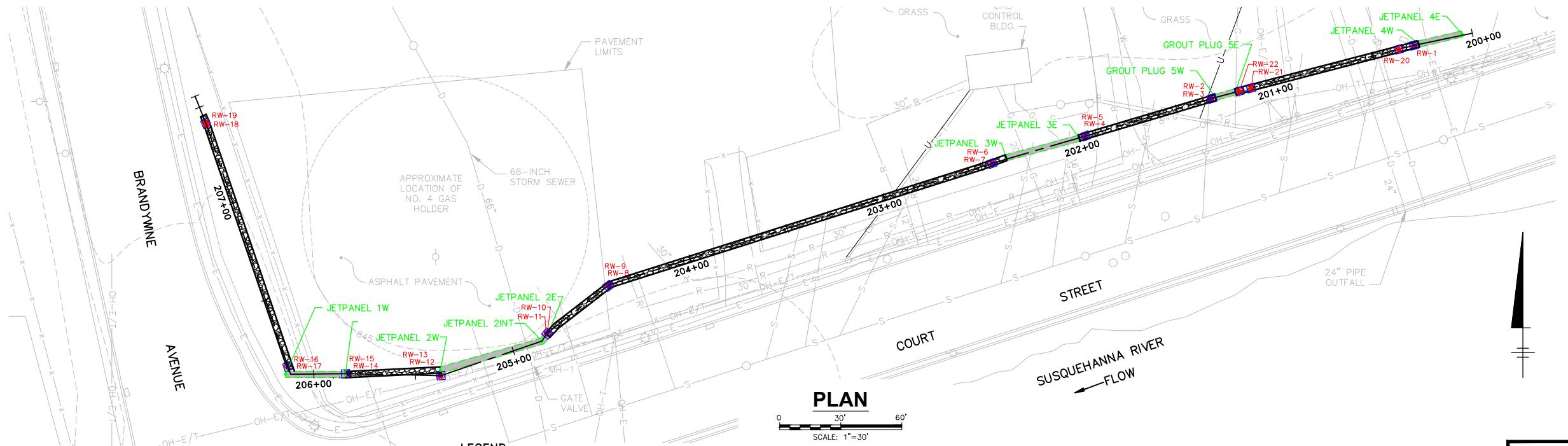
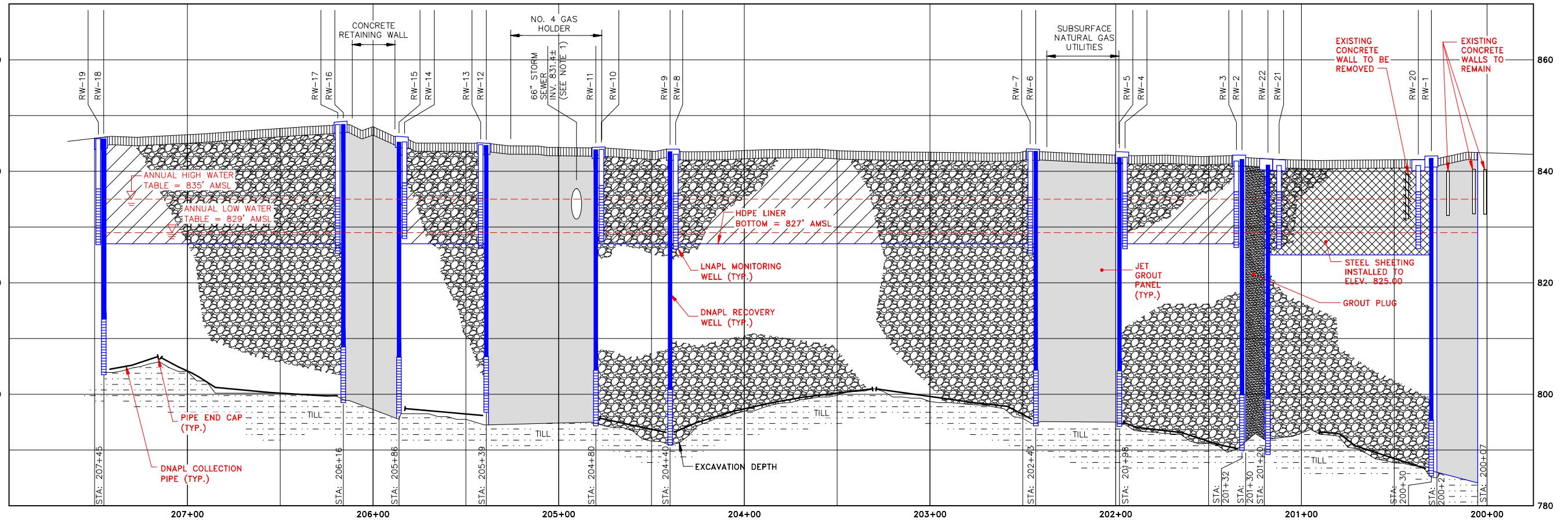
btoc = Below top of casing.

NG = Not Gauged.

NA = Not Available.

## FIGURES





#### **NOTES:**

1. BARRIER WALL ALIGNMENT BASED ON SURVEYED LOCATION OF RECOVERY WELLS AND JET GROUT PANEL LOCATIONS SURVEYED ON AUGUST 17, 2006 AND DECEMBER 28, 2006.
  2. LNAPL MONITORING WELL, DNAPL RECOVERY WELL, AND WELL VAULT DIMENSIONS ARE NOT TO SCALE.
  3. HDPE PANELS ARE OVERLAPPED A MINIMUM OF 4 FEET.
  4. RECOVERY WELLS RW-20, RW-21 AND RW-22 LOCATIONS ARE APPROXIMATE

NEW YORK STATE ELECTRIC & GAS CORP.  
BINGHAMTON, NEW YORK COURT STREET SITE  
**NAPL MONITORING REPORT**

## NAPL BARRIER WALL LOCATION MAP

