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Report. HW. 704031. 2012.05.09. NAPL Barrier Wall
Annual Report.

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Mr. Anthony Karwiel
Project Manager
New York State Department of Environmental Conservation
Remedial Bureau C, 11th Floor
625 Broadway
Albany, New York 12233-7014

ARCADIS of New York, Inc.
6723 Towpath Road
P.O. Box 66
Syracuse
New York 13214-0066
Tel 315.446.9120
Fax 315.446.8053
www.arcadis-us.com

ENVIRONMENT

Subject:
Annual NAPL Monitoring Report – 2011
Passive Barrier Wall – Interim Remedial Measure
Binghamton Court Street, Former MGP
Site #7-04-031

Date:
May 9, 2012

Dear Mr. Karwiel:

Contact:
Keith White

On behalf of the New York State Electric & Gas Corporation (NYSEG), ARCADIS is pleased to present this letter report summarizing the monitoring data collected in accordance with the *NAPL Barrier Wall Interim Remedial Measure Engineering Certification Report* (ARCADIS, 2007; 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, although one round of preliminary monitoring data was collected in January 2007, immediately after the final three NAPL-recovery wells were installed.

Phone:
315.671.9530

Email:
keith.white@arcadis-us.com

Our ref:
B0013082.0005.00003
#2.04

As you are aware, ARCADIS was required to obtain a new roadway work permit from the New York State Department of Transportation (NYSDOT) in order to access the monitoring wells located in Court Street. The delay in obtaining this permit resulted in the postponement of the 2011 year-end monitoring event until February 2012, as reflected on the attached summary tables.

The current monitoring program consists of the following:

- Quarterly monitoring of all 22 NAPL-recovery wells (identified as RW-1 through RW-22 on the attached Figure 1).

Imagine the result

- Semiannual monitoring of a series of "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, PZ03-06A, 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.
- Quarterly monitoring of well MW95-6D located in the northwest corner of the site (Figure 2).

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

Data collected during the recovery-well and sentinel-well monitoring events are contained in Tables 1 and 2, respectively. All monitoring was performed by ARCADIS staff, or by a combination of staff from ARCADIS and AES, Inc.

To date, no measurable NAPL has accumulated in any of the barrier trench recovery wells. Only odors, sheens and trace amount of tar-like material have been observed in them. It should be noted that sediment has accumulated in two of the recovery wells near the 66-inch storm sewer. Between August 2011 and February 2012, approximately 1.5 feet has accumulated in well RW-13 and approximately 6 feet has accumulated in well RW-11. The accumulation may be related to the recent replacement of the 66-inch storm sewer.

As has been the case in the past, LNAPL was detected in two sentinel piezometers located in Court Street, downgradient of the barrier wall. Specifically in 2011-12, LNAPL was detected in June 2011 at PZ01-02 (≤ 0.47 ft) and PZ-03-06B (≤ 0.54 ft), and again in February 2012 at piezometers PZ01-02 (trace) and PZ-03-06B (≤ 0.20 ft), which are located downgradient of the barrier wall within Court Street. Measureable LNAPL and/or a zone of impacted soils near the water table were noted at these two locations 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. A peristaltic pump or disposable bailer was used to remove LNAPL from these wells. NAPL generated during pumping was contained in a drum and staged on-site for future disposal by NYSEG.

In July 2009, DNAPL was detected in monitoring well MW93-6D (see Figure 2). This well is located upgradient of the barrier wall and was not included in the barrier wall monitoring program; however, since historically this well had not had DNAPL observed in it, NYSEG decided to monitor it for DNAPL on a regular basis. Since November 2009, the monitoring of this well has been coupled with the quarterly barrier trench monitoring. Between July 2009 and August of 2011, a total of 2.11 gallons of DNAPL were removed from the monitoring well. Table 3 summarizes the monitoring data collected at MW93-6D. As discussed between the NYSDEC, NYSEG, and ARCADIS during the November 29, 2011 storm sewer rehabilitation weekly construction progress meeting, it was necessary to decommission well MW93-6D to facilitate the installation of the new storm sewer. On December 22, 2011, monitoring well MW93-6D was decommissioned by overdrilling in accordance with the *NYSDEC – Groundwater Monitoring Well Decommissioning Procedures* final document dated August 2009. A Well Decommissioning Record for MW93-6D is included as Attachment 1.

Based on our analysis of the monitoring data collected since initiation of the program in 2007, and specifically the lack of accumulated NAPL in the barrier wall, we recommend reducing the monitoring frequency of the barrier wall to semiannual and continuing with semiannual monitoring of the road wells for the 2012 calendar year.

Due to the recent observation of accumulated sediments at recovery wells RW-11 and RW-13, NYSEG recommends redeveloping both wells. Down-hole televising will be performed before and after the development to confirm the integrity of the wells.

As discussed with the NYSDEC during the November 29, 2011 storm sewer weekly construction progress meeting, NYSEG will reinstall monitoring well MW93-6D. The replacement well will be similar to the original well containing the same screened interval and diameter, but will differ by being constructed of schedule 40 PVC and containing a PVC sump grouted in-place below the screen. The capacity (length) of the sump will be large enough to contain DNAPL without overtopping on a monitoring frequency (semiannual) similar to that proposed for the barrier wall and road wells. The length of the sump will be calculated using accumulation rate data collected from the previous monitoring events.

NYSEG will again prepare an annual report summarizing the findings of the monitoring events following the 2012 calendar year. The report will include updated versions of the three tables contained in this report, a construction log for the replacement MW93-6D well, and pertinent information associated with the redevelopment and televising of recovery wells RW-11 and RW-13. The report will also include recommendations for modifying the monitoring program, if necessary.

Sincerely,

ARCADIS of New York, Inc.



Keith A. White, C.P.G.
Principal in Charge

Attachments

Copies:

David A. Cornell, ARCADIS

References

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

ARCADIS, 2008. *NAPL Monitoring Report, Passive Barrier Wall - Interim Remedial Measure*. Prepared for New York State Department of Environmental Conservation. November 2008.

ARCADIS, 2010. *NAPL Monitoring Report, Passive Barrier Wall - Interim Remedial Measure*. Prepared for New York State Department of Environmental Conservation. March 2010.

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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
							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	16:45	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	1.40	--	--	--	--	--	--	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	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.

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

RECOVERY WELL RW-2													
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
							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.

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

RECOVERY WELL RW-3													
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
							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

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

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

RECOVERY WELL RW-4													
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
							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	16:15	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.

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

RECOVERY WELL RW-5													
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
							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.

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

RECOVERY WELL RW-6													
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
							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	--	--	--	--	--	--	
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

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

RECOVERY WELL RW-7													
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
							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

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

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 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

RECOVERY WELL RW-8													
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
							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

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

RECOVERY WELL RW-9													
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
							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

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

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

RECOVERY WELL RW-10													
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
							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.

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

RECOVERY WELL RW-11													
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
							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	11.41	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	40.37	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.

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.

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

RECOVERY WELL RW-12													
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
							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.

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

RECOVERY WELL RW-13													
Date	Time	Depth to Water (ft bTOC)	GW Elevation (FAMSL)	Depth to Bottom (ft bTOC)	Well Bottom Elevation (FAMSL)	Sediment Thickness (ft)	Depth to LNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Depth to DNAPL (ft bTOC)	Thickness of Layer (ft)	Volume Purged (liters)	Comments/Observations
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.

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

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 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

RECOVERY WELL RW-14													
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
							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.

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

RECOVERY WELL RW-15													
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
							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.

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

RECOVERY WELL RW-16													
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
							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.

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

RECOVERY WELL RW-17													
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
							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.

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

RECOVERY WELL RW-18													
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
							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	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.

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

RECOVERY WELL RW-19													
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
							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	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.

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

RECOVERY WELL RW-20													
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
							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 foot 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.

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

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.

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

RECOVERY WELL RW-21													
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
							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 1inch 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.

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

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 1
Barrier Wall Fluid-Level Monitoring

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

RECOVERY WELL RW-22													
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
							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 ₂ = 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.

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	Installed Well Depth (ft-TIC)	11/24/2004				1/28/2005				8/9/2007				3/18/2008			
		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)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft-TIC)	NAPL Thickness (ft)
MW97-07S	NA	17.43	24.86	--	--	15.8	24.65	--	--	18.09	24.83	--	--	15.21	24.81	--	--
MW01-07R	108.02	16.47	100+	--	--	14.6	108.65	--	--	16.70	+100	--	--	13.71	108.79	--	--
NMW-1	43.45	14.38	40.35	--	--	15.87	40.35	--	--	18.01	40.05	--	--	15.70	40.03	--	--
NMW-2	43.73	14.47	42.66	--	--	NA	NA	--	--	15.10	42.78	--	--	12.26	42.75	--	--
PZ01-02	20.60	10.03	20.58	10.00	0.03	8.31	20.6	8.28	0.03	10.57	17.40	--	--	7.68	17.25	7.57	0.11
PZ03-01D	46.39	15.78	46.72	--	--	14.17	46.5	--	--	16.39	46.70	--	--	13.55	46.76	--	--
PZ03-02A	15.76	14.08	15.35	--	--	12.25	15.1	--	--	Dry	14.67	--	--	11.78	14.70	--	--
PZ03-02D	55.27	14.28	54.72	--	--	12.35	54.5	--	--	14.82	54.13	--	--	12.00	54.10	--	--
PZ03-03A	10.64	10.71	10.96	--	--	10.15	10.9	--	--	8.68	8.68	--	--	8.67	8.67	--	--
PZ03-03B	23.67	11.78	22.2	--	--	10.1	22.1	--	--	12.51	21.90	--	--	9.65	21.21	--	--
PZ03-03D	49.73	11.89	49.41	--	--	NA	NA	--	--	12.56	48.10	--	--	9.69	48.05	--	--
PZ03-04A	14.62	10.33	14.60	--	--	9.25	14.60	--	--	10.97	14.60	--	--	8.12	14.38	--	--
PZ03-04B	21.54	10.96	22.06	--	--	9.52	22.06	--	--	11.70	21.19	--	--	8.82	21.21	--	--
PZ03-04D	41.61	11.07	41.62	--	--	9.46	41.60	--	--	11.75	41.50	--	--	8.91	41.18	--	--
PZ03-05A	12.69	10.64	12.38	--	--	9.23	12.35	--	--	6.20	6.20	--	--	Dry	6.20	--	--
PZ03-05B	16.69	10.66	15.92	--	--	9.33	15.95	--	--	11.42	15.76	--	--	8.11	15.70	--	--
PZ03-05C	27.72	10.75	27.59	--	--	9.15	27.60	--	--	11.48	24.67	--	--	7.78	24.70	--	--
PZ03-05D	44.69	10.61	44.80	--	--	9.93	44.80	--	--	9.85	33.74	--	--	5.89	33.75	--	--
PZ03-06A	11.65	9.70	11.51	--	--	8.27	11.50	--	--	10.30	11.50	--	--	6.92	11.46	--	--
PZ03-06B	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	8.40	17.25	8.26	0.14
PZ03-06C	32.65	10.25	32.68	--	--	6.07	32.65	--	--	11.00	31.90	--	--	8.14	31.75	--	--
PZ03-06D	51.09	5.90	51.00	--	--	8.55	51.00	--	--	7.01	50.98	--	--	6.07	50.95	--	--
PZ03-07A	10.67	8.85	10.50	--	--	7.50	10.50	--	--	8.61	10.35	--	--	6.42	10.38	--	--
PZ03-07B	16.58	9.31	16.67	--	--	7.68	16.70	--	--	10.00	16.26	--	--	7.38	16.22	--	--
PZ03-07C	30.57	9.46	32.85	--	--	7.80	32.85	--	--	10.10	31.20	--	--	7.23	30.90	--	--
PZ03-07D	55.14	9.50	52.90	--	--	7.80	52.90	--	--	10.23	52.76	--	--	7.31	52.62	--	--
PZ03-08A	11.59	9.89	11.45	--	--	7.10	11.45	--	--	9.28	10.97	--	--	6.39	10.98	--	--
PZ03-08B	17.59	9.08	18.68	--	--	7.45	18.65	--	--	9.75	17.35	--	--	6.91	17.40	--	--
PZ03-08C	30.63	9.15	30.65	--	--	7.50	30.65	--	--	9.84	30.27	--	--	6.98	30.30	--	--
PZ03-08D	55.59	9.12	54.68	--	--	7.50	54.70	--	--	9.81	55.22	--	--	6.98	55.00	--	--
PZ03-09A	22.76	19.47	47.17	--	--	18.00	21.50	--	--	NA	NA	--	--	17.43	21.80	--	--
PZ03-09D	47.59	19.12	47.17	--	--	17.54	47.00	--	--	NA	NA	--	--	16.91	47.13	--	--

See Notes on Page 3.

Table 2
Offsite Fluid-Level Monitoring

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

Well ID	Installed Well Depth (ft-TIC)	11/19/2008				5/29/2009				11/9/2009				5/28/2010			
		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)	DTW (ft-TIC)	DTB (ft-TIC)	DTNAPL (ft TIC)	NAPL Thickness (ft)
MW97-07S	NA	17.32	24.90	--	--	16.65	24.92	--	--	16.91	24.82	--	--	17.67	24.82	--	--
MW01-07R	108.02	16.37	109.02	--	--	15.48	110.00	--	--	15.48	110.00	--	--	15.82	108.80	--	--
NMW-1	43.45	18.20	40.52	--	--	17.58	40.40	--	--	17.67	40.35	--	--	18.24	40.31	--	--
NMW-2	43.73	14.59	42.95	--	--	13.04	43.02	--	--	14.17	42.00	--	--	15.64	42.70	--	--
PZ01-02	20.60	9.70	17.30	9.61	0.09	9.49	17.29	8.71	0.78	9.65	17.30	9.20	0.45	10.21	17.28	9.54	0.67
PZ03-01D	46.39	15.88	46.76	--	--	15.23	46.69	--	--	15.37	46.72	--	--	15.94	46.62	--	--
PZ03-02A	15.76	13.02	14.80	--	--	11.93	14.80	--	--	13.59	14.75	--	--	14.18	14.70	--	--
PZ03-02D	55.27	13.09	54.17	--	--	13.60	54.18	--	--	13.83	54.16	--	--	14.52	54.12	--	--
PZ03-03A	10.64	8.73	8.73	--	--	8.70	8.70	--	--	8.79	8.79	--	--	DRY	8.72	--	--
PZ03-03B	23.67	11.81	21.91	--	--	11.02	20.92	--	--	10.79	21.90	--	--	12.08	21.88	--	--
PZ03-03D	49.73	11.86	48.04	--	--	11.08	48.03	--	--	11.38	48.02	--	--	12.13	48.00	--	--
PZ03-04A	14.62	10.81	14.43	--	--	10.06	14.46	--	--	10.08	14.42	--	--	10.78	14.45	--	--
PZ03-04B	21.54	11.12	21.22	--	--	10.72	21.21	--	--	10.49	21.19	--	--	11.29	21.21	--	--
PZ03-04D	41.61	10.97	41.24	--	--	10.12	41.30	--	--	10.53	41.32	--	--	11.33	41.30	--	--
PZ03-05A	12.69	6.18	6.18	--	--	6.20	6.20	--	--	6.20	6.20	--	--	6.18	6.18	--	--
PZ03-05B	16.69	8.69	15.75	--	--	10.12	15.71	--	--	9.78	15.75	--	--	10.94	15.75	--	--
PZ03-05C	27.72	10.75	24.69	--	--	10.00	24.72	--	--	9.92	24.64	--	--	10.81	24.75	--	--
PZ03-05D	44.69	11.11	33.75	--	--	9.61	33.79	--	--	9.23	33.80	--	--	9.81	33.75	--	--
PZ03-06A	11.65	10.08	11.52	10.01	0.07	9.32	11.50	--	--	9.38	11.50	9.32	0.06	9.97	11.47	--	--
PZ03-06B	18.60	10.91	16.88	10.78	0.13	9.81	16.90	8.19	1.62	9.71	16.80	9.51	0.20	11.32	16.45	10.32	1.00
PZ03-06C	32.65	9.92	31.70	--	--	9.02	31.72	--	--	9.59	31.69	--	--	10.62	31.60	--	--
PZ03-06D	51.09	7.62	51.03	--	--	7.93	51.00	--	--	8.41	50.80	--	--	9.07	50.90	--	--
PZ03-07A	10.67	9.16	10.33	--	--	8.60	10.35	--	--	8.27	10.35	--	--	8.72	10.32	--	--
PZ03-07B	16.58	9.14	16.27	--	--	8.22	16.25	--	--	8.72	16.24	--	--	9.69	16.25	--	--
PZ03-07C	30.57	8.93	30.89	--	--	8.61	30.95	--	--	7.88	30.92	--	--	9.38	30.87	--	--
PZ03-07D	55.14	9.12	52.70	--	--	9.07	52.56	--	--	8.83	52.75	--	--	9.48	52.60	--	--
PZ03-08A	11.59	8.84	10.95	--	--	8.12	11.00	--	--	8.27	11.00	--	--	9.00	10.98	--	--
PZ03-08B	17.59	8.93	17.34	--	--	7.98	17.42	--	--	8.42	17.40	--	--	9.32	17.37	--	--
PZ03-08C	30.63	8.92	30.30	--	--	8.93	30.36	--	--	8.02	30.30	--	--	9.28	30.30	--	--
PZ03-08D	55.59	9.01	54.85	--	--	8.11	55.01	--	--	8.44	54.95	--	--	9.48	54.80	--	--
PZ03-09A	22.76	19.40	21.84	--	--	18.77	21.78	--	--	18.97	21.71	--	--	19.63	21.70	--	--
PZ03-09D	47.59	19.21	47.17	--	--	18.59	46.97	--	--	18.69	46.90	--	--	19.27	46.95	--	--

See Notes on Page 3.

Table 2
Offsite Fluid-Level Monitoring

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

Well ID	Installed Well Depth (ft-TIC)	11/23/2010				6/2/2011				2/15/2012			
		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	NA	16.69	24.81	--	--	15.91	24.89	--	--	15.35	NA	--	--
MW01-07R	108.02	15.51	108.80	--	--	14.32	100.00 +	--	--	NA	NA	--	--
NMW-1	43.45	17.26	40.31	--	--	16.37	40.39	--	--	17.94	40.33	--	--
NMW-2	43.73	13.85	42.76	--	--	12.82	42.72	--	--	14.34	42.64	--	--
PZ01-02	20.60	8.91	17.29	8.86	0.05	8.34	17.22	7.87	0.47	10.05	17.15	--	trace
PZ03-01D	46.39	15.16	46.68	--	--	14.00	46.67	--	--	15.67	36.66	--	--
PZ03-02A	15.76	13.11	14.79	--	--	12.07	14.75	--	--	13.86	14.72	--	--
PZ03-02D	55.27	13.56	54.13	--	--	11.78	54.12	--	--	14.03	54.11	--	--
PZ03-03A	10.64	DRY	8.79	--	--	DRY	8.42	--	--	8.65	8.65	--	--
PZ03-03B	23.67	11.18	21.88	--	--	10.58	21.87	--	--	11.66	21.86	--	--
PZ03-03D	49.73	11.19	48.03	--	--	10.61	47.98	--	--	11.73	48.00	--	--
PZ03-04A	14.62	9.64	14.45	--	--	9.43	14.44	--	--	9.76	14.43	--	--
PZ03-04B	21.54	10.26	21.21	--	--	9.88	21.22	--	--	10.82	21.20	--	--
PZ03-04D	41.61	10.32	41.35	--	--	9.88	41.32	--	--	10.87	41.35	--	--
PZ03-05A	12.69	9.79	NA	--	--	0.80	6.98	--	--	5.68	6.86	--	--
PZ03-05B	16.69	10.37	15.81	--	--	8.68	15.79	--	--	10.51	15.73	--	--
PZ03-05C	27.72	9.75	24.67	--	--	9.11	24.67	--	--	10.64	24.60	--	--
PZ03-05D	44.69	9.26	32.47	--	--	8.32	33.43	--	--	10.75	32.47	--	--
PZ03-06A	11.65	9.25	11.51	9.07	0.18	8.33	11.50	--	--	9.71	11.51	--	--
PZ03-06B	18.60	12.60	16.76	12.45	0.15	9.46	16.64	8.92	0.54	10.20	16.64	10.00	0.20
PZ03-06C	32.65	9.34	31.61	--	--	9.49	31.48	--	--	10.27	32.29	--	--
PZ03-06D	51.09	8.56	50.42	--	--	6.04	50.94	--	--	3.94	50.91	--	--
PZ03-07A	10.67	8.31	10.35	--	--	7.79	10.37	--	--	8.43	10.25	--	--
PZ03-07B	16.58	8.57	16.28	--	--	8.13	16.25	--	--	9.16	15.21	--	--
PZ03-07C	30.57	7.78	30.91	--	--	7.99	30.92	--	--	9.57	30.86	--	--
PZ03-07D	55.14	8.47	52.61	--	--	8.78	52.53	--	--	9.71	52.00	--	--
PZ03-08A	11.59	8.09	10.98	--	--	7.69	11.00	--	--	8.42	10.98	--	--
PZ03-08B	17.59	8.24	17.41	--	--	8.03	17.42	--	--	8.87	17.44	--	--
PZ03-08C	30.63	7.98	30.29	--	--	8.02	30.30	--	--	8.97	30.31	--	--
PZ03-08D	55.59	8.26	54.86	--	--	8.09	54.72	--	--	9.41	55.03	--	--
PZ03-09A	22.76	18.76	21.81	--	--	18.11	21.66	--	--	19.31	21.67	--	--
PZ03-09D	47.59	18.48	47.03	--	--	17.49	47.03	--	--	18.99	46.86	--	--

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. If more than 0.16 ft of LNAPL was observed, it was collected and contained.

Table 3
DNAPL Monitoring Summary - MW93-06D

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 decommissioned prior to the 66-inch storm sewer rehabilitation					
Cumulative Volume of DNAPL Removed at MW93-06D =							2.11

Notes:

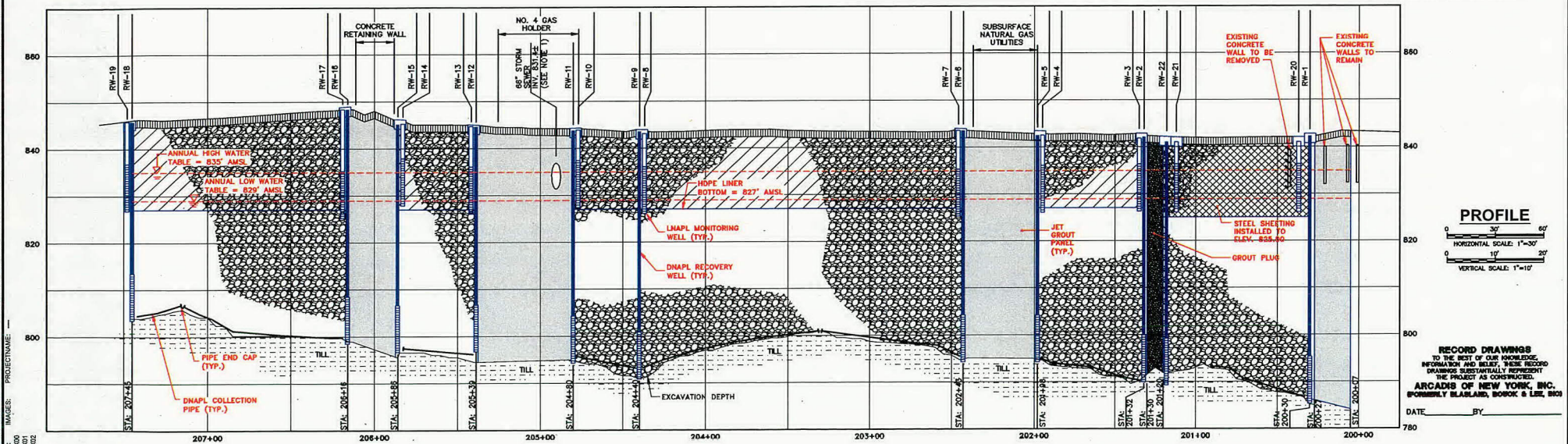
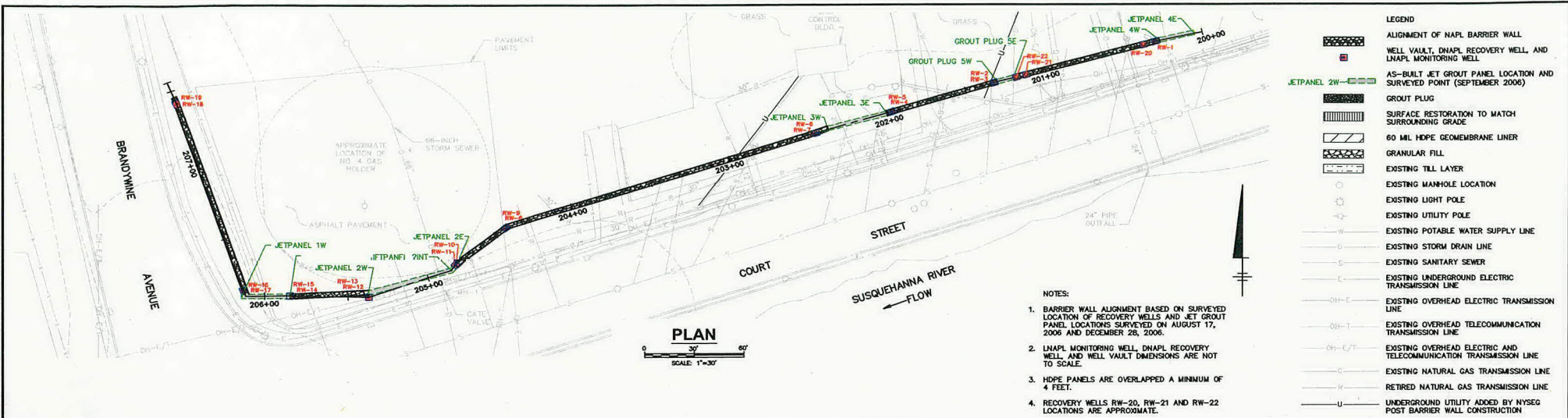
btoc = Below top of casing.

NG = Not Gauged.

NA = Not Available.

Figures

CITY STRATEGIC DIVISION: 141 DE GRUYER, LD. RIC. PM. TM. LYON-ROFF-REF. CITY OF NEW YORK, DEPT. OF ENVIRONMENTAL CONSERVATION, DIVISION OF WATER, 120 RIVER STREET, 10002, NEW YORK, NY 10002-0002. DATE: 10/10/2007. BY: ALLEN ROYCE



SCALE(S) AS INDICATED		Professional Engineer's Name (PE'S FULL NAME) 062251		NEW YORK STATE ELECTRIC & GAS CORPORATION BINGHAMTON, NEW YORK BINGHAMTON COURT STREET FORMER MCP SITE NAPL MONITORING REPORT		ARCADIS Project No. 13062		FIGURE 1	
No. Date Revisions By Ck'd		Date Signed Project Mgr. NY MCS QHS		ARCADIS 6720 Tappan Road Syracuse, NY 13214 CITY, STATE 315-446-9120		Date MARCH 2, 2007			
THIS DRAWING IS THE PROPERTY OF THE ARCADIS GROUP. IT IS TO BE USED ONLY FOR THE PROJECT AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF ARCADIS.									



Attachment A

Well Decommissioning Record for
MW93-6D

FIGURE 3
WELL DECOMMISSIONING RECORD

Site Name: <u>Court St.</u>	Well I.D.: <u>MW-93-6D</u>
Site Location: <u>Binghamton, NY</u>	Driller: <u>Mickey Marshall</u>
Drilling Co.: <u>Parratt Wolff</u>	Inspector: <u>MSE</u>
	Date: <u>12-22-11</u>

DECOMMISSIONING DATA (Fill in all that apply)		WELL SCHEMATIC*	
OVERDRILLING Interval Drilled: <u>0-60'</u> Drilling Method(s): <u>HSA</u> Borehole Dia. (in.): <u>4 1/4" ID, 9" OD</u> Temporary Casing Installed? (y/n): <u>N</u> Depth temporary casing installed: <u>-</u> Casing type/dia. (in.): <u>-</u> Method of installing: <u>-</u>			
CASING PULLING Method employed: <u>Winch</u> Casing retrieved (feet): <u>62' (All)</u> Casing type/dia. (in.): <u>2" Stainless Steel</u>			
CASING PERFORATING Equipment used: <u>-</u> Number of perforations/foot: <u>-</u> Size of perforations: <u>-</u> Interval perforated: <u>-</u>			
GROUTING Interval grouted (FBLs): <u>60'-0'</u> # of batches prepared: <u>3</u> For each batch record: Total Quantity of water used (gal.): <u>~200</u> Quantity of cement used (lbs.): <u>8 x 47lb bags</u> Cement type: <u>Portland</u> Quantity of bentonite used (lbs.): <u>3 x 50lb bags</u> Quantity of calcium chloride used (lbs.): <u>-</u> Volume of grout prepared (gal.): <u>~200-200 gal.</u> Volume of grout used (gal.): <u>~200 gal.</u>			
COMMENTS: <u>62.66' TIC</u> <u>* Used excavator to pull a bollard</u> <u>~60' BGS</u> <u>and Stand Pipe/Pad @ Well</u>			

Parratt Wolff
Drilling Contractor

Mickey Marshall
Department Representative

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.