DATA SUMMARY REPORT
ADDITIONA RI ACTIVITIES
RENSSELAER NON-OWNED
FORMER MGP SITE
RENSSELAER, NEW YORK

Prepared for

Niagara Mohawk Corporation d/b/a
National Grid, Syracuse, New York

May 2010

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Prepared for
Niagara Mohawk Corporation d/b/a National Grid
300 Erie Boulevard West
Syracuse, New York 13202

May 2010

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NYS Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau C, Section A
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Albany, NY 12233-7014

Subject: Rensselaer Non-Owned Former MGP Site (V00488)
Additional RI Activities
Data Summary Report

Dear Ms. Verrigni:

Enclosed is a Data Summary Report (DSR) for additional Remedial Investigation (RI) activities at the Rensselaer Non Owned Former Manufactured Gas Plant (MGP) Site, located on Washington Street in Rensselaer, New York (hereinafter, site). A letter work plan for additional RI activities (September 17, 2009) was submitted to the New York State Department of Environmental Conservation (DEC) and was conditionally approved by the DEC in a letter dated October 15, 2009. The DEC requested that a soil vapor sampling program be implemented as part of the additional RI activities. A revised letter work plan (October 30, 2009) incorporating the requested modification was submitted to the DEC.

This DSR has been prepared in accordance with the October 30, 2009 letter work plan. As listed in the Table of Contents, the DSR consists of 11 figures, 7 tables, and associated appendices.

SCOPE OF INVESTIGATION

With the following exception, all field investigation elements of the October 30, 2009 work plan were completed.

As previously approved by the DEC in an e-mail dated March 15, 2010 to National Grid, the second round of groundwater sampling has been postponed until a time when

groundwater levels contrast with the previous rounds of sampling. The groundwater water levels during the December 2008, April 2009, and December 2009 sampling rounds were similar, and conditions are not expected to be significantly different until late summer, when water levels are typically lower.

Field activities were conducted during the period from November 9, 2009 through March 16, 2010. All soil borings, monitoring wells, and soil vapor probes from these and previous RI and Site Characterization (SC) activities are listed in Table 1 and their locations are shown of Figure 2.

FINDINGS

The main findings of the investigation to date (original RI and additional RI activities) are summarized below.

Hydrogeology

The geologic materials encountered on the site generally consist in ascending order of dark gray shale bedrock, glacial till, a sand and gravel deposit, a finer silt and sand deposit, and anthropogenic fill (see Figures 4 through 6, hydrogeologic cross-sections A-A', B-B', C-C').

Rock fragments retained in the split-spoon sampler after refusal indicate the bedrock immediately underlying the overburden is dark gray shale. The surface of the bedrock (Figure 3) drops from approximately 0 feet NGVD east of Washington Street to -22 feet NGVD north of Huyck Stream. A subtle longitudinal depression that may extend SW-NE across the Site is apparent in the bedrock surface.

Glacial till underlying the former MGP ranges in thickness from approximately 4 to 18 feet. The till generally consists of dense, poorly sorted silt, sand and gravel. It becomes thinner and less dense toward the north. In the northern part of the study area, where the till and/or bedrock surface is deeper, this surface is overlain by approximately 5-15 feet of grey, poorly sorted sand and gravel with minor amounts of silt.

The overlying silt and sand deposit generally consists of mixtures of grey to brown sand and silt with occasional, relatively minor zones of fine to medium gravel. At several locations in the study area the upper 3-5 feet of the silt and sand deposit consist of silty clay or clayey silt. The silt and sand deposit generally thickens to the north. The uppermost unconsolidated material in the study area is generally anthropogenic fill composed primarily of reworked sand and silt mixed with varying amounts of brick, cinders, ash, and coal fragments. The fill varies in thickness from a few inches to more than 10 feet and is largely absent immediately adjacent to the present-day channel of Huyck Stream.

The water table occurs in the fill and the silt and sand deposit, generally about six to eight feet below ground surface. As part of the additional RI activities, groundwater levels were measured on December 7, 2009; December 10, 2009; January 21, 2010; and February 18, 2010 (Table 2). Surface water levels were measured in stream gauges on December 7, 2009 and December 10, 2009, but frozen conditions prevented use of the stream gauges on the later dates. Water table contours for December 10, 2009 (Figure 7) indicate that the overburden groundwater in the vicinity of the site flows north-northeast to north toward Huyck Stream. Overburden groundwater immediately north of the stream also appears to flow toward the stream. Water levels measured in the deep/shallow well pair MW-106S/D indicate an upward gradient on December 10, 2009; January 21, 2010; and February 18, 2010. A downward gradient is indicated by the MW-106S/D well pair on December 7, 2009; however, the water level in the shallow well is anomalously high and therefore questionable (i.e., potential measurement error). Water levels measured in deep/shallow well pair MW-109S/D indicate an upward gradient on December 7, 2009; December 10, 2009; and January 21, 2010, whereas a slight downward gradient is indicated on February 18, 2010. Based on the available water level data, groundwater elevations in the shallow and deep wells on both sides of Huyck Stream are higher than the water level in the adjacent section of the stream and thus it appears overburden groundwater present beneath the site discharges to Huyck Stream.

Slug testing of newly installed monitoring wells was performed on March 16, 2010. A summary of the estimated horizontal hydraulic conductivity (K) values from slug tests conducted on all monitoring wells is provided in Table 3. The K values range from 1.1×10^{-5} to 1.7×10^{-3} cm/sec. The greatest hydraulic conductivities were measured in wells screened primarily in loose fill (MW-111-09) or sand/gravel/loose till (MW-109D-09). The lowest hydraulic conductivities were measured in wells screened in silty clay and dense till (MW-101-05) or sand/silt and dense glacial till (MW-104-08).

Subsurface Utilities

As noted in the previous data summary report (Brown and Caldwell Associates, June 2009), a combined sanitary/storm sewer is present under Washington Street (Figure 2). There are no indications from water level monitoring data that the sewers or associated laterals are substantially influencing groundwater flow.

Two catch basins (CB-1, CB-2) located on the west and east sides Washington Street near the intersection with Huyck Square discharge to sewer manhole MH-1. When inspected in 2008, catch basin CB-1 was filled with debris and its interior could not be inspected. A third catch basin (CB-3), on the northwest corner of Huyck Square and Washington Street, was filled with debris and thus the pipe leading from the catch basin could not be observed. As was the case during earlier water level measurements, the elevations of the water table on December 10, 2009 were higher than the surveyed

invert elevations of the combined sanitary/storm sewer in the vicinity of MH-1 (8.7' NGVD, 8.9' NGVD), indicating a potential for groundwater to infiltrate the sewer pipe and the surrounding bedding (Figure 7 Water Table Contours; Figure 6 Cross-Section C-C'). However, evaluation of the groundwater elevation data does not indicate influence from infiltration to the sewers.

The surveyed inverts of the catch basin laterals are higher than the sewer pipe and the measured groundwater levels; however, groundwater may potentially infiltrate the laterals during high water table conditions. During the November 2008 RI, water was observed to be infiltrating the brick lined walls of CB-2; however, this may have resulted from rainfall at the time of the inspection. Direct evidence of infiltration was not noted in MH-1 at that time.

Observed MGP/Hydrocarbon Impacts

NAPL and/or sheens were observed in five out of the 10 borings advanced during the November 2009 RI activities. These observations indicate NAPL impacts farther to the north and east of those previously identified. Table 4 provides descriptions and depth intervals of NAPL observations recorded during SC and RI activities. Figure 9 provides a plan view of locations where NAPL has been observed, and the vertical positions of visual and olfactory observations are shown on the hydrogeologic cross-sections (Figures 4 through 6).

North of Huyck Square, apparent coal tar (DNAPL) was observed in direct-push borings B-113-09 and B-114-09 in the sand and gravel deposit between the site and Huyck Stream (Figures 4 and 5, Cross-Sections A-A', B-B'). Borings B-113-09 and B-114-09 were advanced to evaluate whether DNAPL in the vicinity of MW-106S/D migrated toward Huyck Stream by a pathway below 4 feet NGVD, undetected by previously-drilled hand auger borings SOIL-2, SOIL-3, and SOIL-4. Because hand-held equipment had to be used to drive the direct-push sampler in this soft, wet terrain, B-113-09 and B-114-09 could only be advanced to depths of 11.0 and 14.4 feet bgs, respectively. The vertical distribution of NAPL in B-113-09 and B-114-09, and in borings to the south, suggests that DNAPL tars may have migrated downward and then laterally in a northeasterly direction from the northern gas holder and the tar well through the sand and gravel deposit, but at depths well below the current stream bed. The DNAPL appears to have penetrated downward into the coarser, less dense glacial till in the vicinity of MW-106S/D-08 (Cross-Section B-B'). No evidence of NAPL or other MGP impacts was observed in the soil borings north of Huyck Stream (MW-108-09, W-109D-09).

East of Washington Street, red-black DNAPL (as blebs or incomplete saturation) with a tar-like odor was observed in the silt and sand deposit overlying glacial till in borings MW-111-09 (10 to 10.6 feet bgs) and B-116-09 (10.2 to 11.3 and 13. 2 to 13.6 feet bgs). Sheens with tar-like odors were noted in boring B-115-09. These three locations are opposite areas where NAPL had been observed during previous field activities on or

immediately north of the site. Some odors associated with these previous observations were petroleum- or fuel-like (B-108-08, B-111-08, MW-107-08, TP-101-05), suggesting the possibility of impacts in these areas by hydrocarbons unrelated to the former MGP.

Subsurface Soil Analytical Results

Subsurface soil samples collected during the additional RI activities were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), Total Cyanide, and free cyanide. The results of these analyses were compared to the New York State Subpart 375 Soil Cleanup Objectives (SCOs) for Protection of Public Health-Residential Use (site is zoned for residential use), Protection of Ecological Resources, or Protection of Groundwater (Table 5, Figure 8).

In the additional RI soil samples, no concentrations of benzene, ethylbenzene, toluene, or isomers of xylene (BTEX compounds) were detected above the applicable SCOs. The only VOC detected above the SCOs was acetone, a common laboratory contaminant. Polycyclic aromatic hydrocarbons (PAHs) were detected above one or more of the SCOs in additional RI soil samples from five (5) locations. The locations with exceedances of the SCOs for PAHs fall within areas impacted by NAPL or sheens. No other SVOCs were detected in the additional RI soil samples above the applicable SCOs. Total Cyanide was not detected above the applicable SCOs in subsurface soil samples from any location.

During the previous SC and RI activities, subsurface soil samples from 14 locations contained concentrations of BTEX compounds above one or more of the applicable SCOs (Figure 8). PAHs were detected above one or more of the SCOs in subsurface soil samples from 17 locations. Samples from previous RI and SC activities with exceedances of the SCOs for BTEX or PAHs generally fall within areas impacted by NAPL. Total Cyanide was not detected above the applicable SCOs in subsurface soil samples from any location.

Surface Soil Analytical Results

During the previous RI activities, surface soil samples were collected at ten locations from the top two inches of soil after the overlying vegetation was removed. The surface soil samples were analyzed for TCL SVOCs, Total Cyanide, and free cyanide. The results of these analyses were compared to the Subpart 375 SCOs for Protection of Public Health-Residential Use, Protection of Ecological Resources, or Protection of Groundwater (Table 5 and Figure 7 from the previous DSR [Brown and Caldwell Associates, June 2009]). PAHs were detected above one or more of the SCOs in surface soil samples from four locations. These exceedances were limited to carcinogenic PAHs, which have very low SCOs for protection of public health (1 mg/kg or less). Total PAH concentrations in surface soil ranged from 1.3 to

37 mg/kg, levels that are not unexpected given the urban setting. No other SVOCs (i.e., non-PAH SVOCs) were detected in the surface soil samples above the applicable SCOs. Total Cyanide was not detected above the applicable SCOs at any surface soil sample.

Stream Sediment Analytical Results

During the previous RI activities (December 2008), stream sediment samples (approximate 0-6 inch depth interval) were collected at two locations near the south shore of the Huyck Stream, and at a background location east of the Washington Street bridge (upstream from the former MGP). The sediment samples were analyzed for BTEX, Total Cyanide, free cyanide, and total organic carbon (TOC), as well as for 34 alkylated and non-alkylated PAH compounds. As discussed in detail in the previous Data Summary Report (June 2009), the results of the sediment sampling and analyses indicate that there are no site related impacts in the shallow sediments in Huyck Stream.

Groundwater Analytical Results

One comprehensive round of groundwater sampling was conducted during the additional RI, on December 8-10, 2009. This round included the sampling of newly-installed wells and wells installed during previous SC and RI activities. As noted above, the approved work plan for additional RI activities specified a second round of groundwater sampling during a time when groundwater levels contrast with the first round of sampling. However, as the water levels during the December 2008, April 2009, and December 2009 sampling rounds were similar and apparently representative of relatively high groundwater conditions, the second round has been postponed until late summer 2010 when water levels may be lower.

The groundwater samples were analyzed for TCL VOCs, TCL SVOCs, Total Cyanide, and free cyanide. Results of the analyses were compared to the 6 NYCRR Part 703 groundwater standards for Class GA water (groundwater) or, where no such standard exists, the corresponding guidance value from Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 (Table 6, Figures 10 and 11). In accordance with the work plan for additional RI activities, no groundwater samples were collected from MW-106S-08 or MW-106D-08 because NAPL was detected in these monitoring wells during water level measurements and NAPL gauging prior to sampling.

The analytical results for the December 2009 round are similar to the December 2008 and April 2009 rounds. One potentially significant change is the decrease over time in the concentrations of BTEX and Naphthalene in MW-105-08. No exceedances of the standards/guidance for these compounds were detected in the most recent of the three sampling events, whereas initial samples collected in December 2008 indicated the

concentrations of these constituents were above the standards/guidance values. BTEX compounds were detected above the standards in monitoring wells MW-102-05, MW-103-05, and MW-107-08. The PAH compounds naphthalene, 2-methylnaphthalene phenanthrene and/or acenaphthene were detected above standards/guidelines in MW-102-05, MW-103-05, MW-105-08, and MW-107-08.

No exceedances of the standards/guidelines for VOCs or SVOCs were detected in the upgradient well MW-101-05 or in sidegradient well MW-104-05, located between the site and the residential yards on Academy Street. No exceedances were detected in any of the wells north of Huyck Stream or east of Washington Street.

As in previous RI sampling rounds, the only exceedance of the standard for Total Cyanide was in the upgradient well MW-101-05. A low (estimated) concentration of free cyanide (8J μg/L) was also detected in the sample from this well.

We look forward to discussing the RI and further investigations with you at our meeting on May 18.

Very truly yours,

Brown and Caldwell Associates

Jeffrey R. Caputi, P.E., CHMM, QEP
Vice President

Brown and Caldwell

Frank J. Williams, P.G.
Supervising Geologist

Enclosures
cc: M. Schuck, NYSDOH
E. Neuhauser, Ph.D., National Grid
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RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

		Survey Coordinates		Ground Surface	Depth to	Base of Fill	Depth to	Glacial Till	Depth to	Bedrock	Screened Interval		Screened Interval		Total Depth	
	Installation	NY State Plane - NAD 83		Elevation[1]	Base of Fill	Elevation	Glacial Till	Elevation	Bedrock	Elevation	Top	Bottom	Top	Bottom		
Location ID	Date	Northing	Easting	(ft., NGVD)	(ft., BGS)	(ft., NGVD)	(ft., BGS)	(ft., NGVD)	(ft., BGS)	(ft., NGVD)	(ft., BGS)	(ft., BGS)	(ft., NGVD)	(ft., NGVD)	(ft., BGS)	(ft., NGVD)
Soil Borings																
B-104-05	6/18/2005	1387603.4	695344.7	16.58	--	--	--	--	--	--	--	--	--	--	10.0	6.6
B-105-05	6/18/2005	1387561.7	695294.8	17.19	4.3	12.9	9.6	7.6	--	--	--	--	--	--	12.7	4.5
B-106-05	6/25/2005	1387593.0	695248.7	18.09	6.2	11.9	10.2	7.9	--	--	--	--	--	--	21.7	-3.6
B-107-08	11/22/2008	1387524.7	695296.9	16.76	2.9	13.9	8.4	8.4	22.5	-5.7	--	--	--	--	22.8	-6.0
B-108-08	11/22/2008	1387567.6	695321.8	16.69	8.0	8.7	10.2	6.5	23.0	-6.3	--	--	--	--	23.3	-6.6
B-109-08	11/20/2008	1387591.2	695436.4	15.83	10.3	5.5	--	--	19.0	-3.2	--	--	--	--	19.1	-3.3
B-110-08	11/18/2008	1387616.3	695360.6	16.31	4.0	12.3	16.4	-0.1	24.2	-7.9	--	--	--	--	24.3	-8.0
B-111-08	11/17/2008	1387683.1	695313.0	17.26	4.0	13.3	16.5	0.8	25.3	-8.0	--	--	--	--	25.3	-8.0
B-112-08	11/25/2008	1387532.3	695337.5	16.14	2.0	14.1	8.9	7.2	--	--	--	--	--	--	19.1	-3.0
B-113-09	11/18/2009	1387760.2	695343.0	7.10	0.0	7.1	--	--	--	--	--	--	--	--	11.0	-3.9
B-114-09	11/18/2009	1387748.8	695421.1	7.34	0.0	7.3	--	--	--	--	--	--	--	--	15.0	-7.7
B-115-09	11/11/2009	1387621.3	695472.3	15.99	6.3	9.7	18.0	-2.0	24.2	-8.2	--	--	--	--	24.7	-8.7
B-116-09	11/10/2009	1387541.4	695415.9	16.42	7.1	9.3	14.0	2.4	14.8	1.6	--	--	--	--	16.9	-0.5
B-117-09	11/12/2009	1387497.0	695383.0	16.46	10.0	6.5	10.0	6.5	16.0	0.5	--	--	--	--	16.1	0.4
SOIL-1-08	12/3/2008	1387880.4	695670.1	12.60	--	--	--	--	--	--	--	--	--	--	3.5	9.1
SOIL-2-08	12/3/2008	1387757.8	695441.6	7.12	--	--	--	--	--	--	--	--	--	--	4.0	3.1
SOIL-3-08	12/3/2008	1387756.5	695385.1	7.37	--	--	--	--	--	--	--	--	--	--	3.5	3.9
SOIL-4-08	12/3/2008	1387769.6	695330.5	7.52	--	--	--	--	--	--	--	--	--	--	3.5	4.0
SOIL-5-08	12/3/2008	1387702.9	695430.8	11.42	--	--	--	--	--	--	--	--	--	--	0.2	11.2
SOIL-6-08	12/3/2008	1387718.8	695384.3	9.10	--	--	--	--	--	--	--	--	--	--	0.2	8.9
SOIL-7-08	12/3/2008	1387703.5	695270.3	17.16	--	--	--	--	--	--	--	--	--	--	0.2	17.0
SOIL-8-08	12/3/2008	1387573.7	695174.0	17.94	--	--	--	--	--	--	--	--	--	--	0.2	17.7
SOIL-9-08	12/3/2008	1387471.0	695302.7	16.24	--	--	--	--	--	--	--	--	--	--	0.2	16.0
SOIL-10-08	12/3/2008	1387548.2	695421.5	16.17	--	--	--	--	--	--	--	--	--	--	0.2	16.0
Monitoring Wells																
MW-101-05	6/19/2005	1387532.5	695276.2	17.18	4.8	12.4	10.5	6.7	--	--	4.0	14.0	13.2	3.2	14.0	3.2
MW-102-05	6/18/2005	1387627.5	695359.9	16.24	6.0	10.2	20.7	-4.5	--	--	5.0	20.0	11.2	-3.8	22.0	-5.8
MW-103-05	6/19/2005	1387689.9	695306.1	17.47	5.0	12.5	19.0	-1.5	--	--	5.0	20.0	12.5	-2.5	21.5	-4.0
MW-104-08	12/2/2008	1387667.3	695247.1	17.39	5.1	12.3	11.0	6.4	25.1	-7.7	6.0	16.0	11.4	1.4	25.1	-7.7
MW-105-08	11/24/2008	1387726.8	695325.3	16.34	4.2	12.1	--	--	22.5	-6.2	8.0	16.0	8.3	0.3	22.8	-6.5
MW-106S-08	11/19/2008	1387675.3	695391.1	16.45	10.3	6.2	18.9	-2.5	25.6	-9.2	8.0	18.0	8.5	-1.6	25.6	-9.2
MW-106D-08	11/21/2008	1387664.0	695391.2	16.19	10.2	6.0	20.0	-3.8	--	--	19.0	24.0	-2.8	-7.8	25.4	-9.2

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	Installation	NY State Plane - NAD 83		Elevation[1]	Base of Fill	Elevation	Glacial Till	Elevation	Bedrock	Elevation	Top	Bottom	Top	Bottom		
Location ID	Date	Northing	Easting	(ft., NGVD)	(ft., BGS)	(ft., NGVD)	(ft., BGS)	(ft., NGVD)	(ft., BGS)	(ft., NGVD)	(ft., BGS)	(ft., BGS)	(ft., NGVD)	(ft., NGVD)	(ft., BGS)	(ft., NGVD)
MW-107-08	12/3/2008	1387569.2	695374.9	15.78	2.0	13.8	15.0	0.8	20.3	-4.5	5.0	15.0	10.8	0.8	20.3	-4.5
MW-108-09	11/18/2009	1387895.6	695396.1	15.73	4.3	11.4	33.6	-17.9	34.4	-18.7	7.0	17.0	8.7	-1.3	35.0	-19.3
MW-109S-09	11/19/2009	1387856.0	695502.3	15.63	--	--	--	--	--	--	7.0	17.0	8.6	-1.4	17.0	-1.4
MW-109D-09	11/19/2009	1387862.1	695507.2	15.51	4.6	10.9	32.7	-17.2	37.7	-22.2	28.0	38.0	-12.5	-22.5	38.0	-22.5
MW-110-09	11/17/2009	1387670.3	695505.2	16.39	8.0	8.4	20.5	-4.1	23.2	-6.8	7.0	17.0	9.4	-0.6	25.5	-9.1
MW-111-09	11/12/2009	1387586.6	695446.7	16.31	10.6	5.7	14.3	2.0	20.2	-3.9	5.0	15.0	11.3	1.3	20.3	-4.0
Test Pits																
TP-101-05	6/11/2005	1387611.4	695350.5	16.55	--	--	--	--	--	--	--	--	--	--	7.8	8.8
TP-102-05	6/11/2005	1387555.4	695299.7	16.83	4.2	12.6	--	--	--	--	--	--	--	--	7.1	9.7
TP-103-05	6/12/2005	1387663.7	695291.9	17.67	4.9	12.8	10.4	7.3	--	--	--	--	--	--	10.4	7.3
TP-104-05	6/11/2005	1387533.9	695327.5	16.27	3.3	13.0	--	--	--	--	--	--	--	--	9.3	7.0
TP-105-08	11/22/2008	1387680.3	695296.0	17.46	--	--	--	--	--	--	--	--	--	--	10.0	7.5
Sediment Samples																
SED-1-08	12/9/2008	1387858.8	695654.7	3.31	--	--	--	--	--	--	--	--	--	--	0.5	2.81
SED-2-08	12/3/2008	1387783.0	695413.1	6.23	--	--	--	--	--	--	--	--	--	--	0.5	5.73
SED-3-08	12/3/2008	1387776.6	695356.6	6.74	--	--	--	--	--	--	--	--	--	--	0.5	6.24
Soil Vapor Points																
SV-1-09	11/9/2009	1387515.4	695279.0	20.23	--	--	--	--	--	--	2.5	3.0	17.7	17.2	3.0	17.2
SV-2-09	11/9/2009	1387618.3	695211.7	17.98	--	--	--	--	--	--	3.0	3.5	15.0	14.5	4.0	14.0
SV-3-09	11/9/2009	1387689.7	695261.0	17.08	--	--	--	--	--	--	2.5	3.0	14.6	14.1	4.0	13.1
SV-4-09	11/9/2009	1387716.4	695337.5	16.05	4.9	11.2	--	--	--	--	4.0	4.5	12.1	11.6	8.0	8.1
SV-5-09	11/9/2009	1387663.4	695374.8	16.13	5.0	11.1	--	--	--	--	4.0	4.5	12.1	11.6	8.0	8.1
Staff Gauges																
SG-1-09	11/16/2009	1387821.6934	695482.2719	10.49	--	--	--	--	--	--	--	--	--	--	--	--
SG-2-09	11/16/2009	1387825.9109	695378.2954	10.43	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
(1) - For monitoring wells, value presented reflects ground surface elevation at time of installation
-- Data not available or not applicable
NGVD - National Geodetic Vertical Datum
BGS - Below Ground Surface
NE - Not encountered

TABLE 2
GROUNDWATER ELEVATIONS AND NAPL MONITORING DATA
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Well ID	Top of Casing Elevation (ft., NGVD)	Screened Interval (ft., BGS)	12/19/2008				4/27/2009			
			Depth to Water (ft., BTOC)	Water Elevation (ft., NGVD)	Depth to NAPL (ft., BTOC)	Comments	Depth to Water (ft., BTOC)	Water Elevation (ft., NGVD)	Depth to NAPL (ft., BTOC)	Comments
MW-101-05	16.99	4-14	5.47	11.52	ND[1]	Moderate tar-like odor	6.06	10.93	ND	
MW-102-05	15.96	5-20	6.72	9.24	ND[2]	NAPL on bottom of probe, strong tar-like odor	7.03	8.93	ND[3]	Moderate tar-like odor
MW-103-05	17.19	5-20	8.19	9.00	ND	Moderate tar-like odor	8.73	8.46	ND	Slight tar-like odor
MW-104-08	17.14	6-16	6.51	10.63	ND	Slight musty odor	7.68	9.46	ND	
MW-105-08	19.10	8-16	11.23	7.87	ND		11.75	7.35	ND	Slight tar-like odor
MW-106S-08	19.10	8-18	10.78	8.32	ND[4]	Very strong tar-like odor. DNAPL and LNAPL observed within evacuated water during NAPL gauging activities	11.15	7.95	ND[2]	Strong tar-like odor. Black-red NAPL coating along tape and probe
MW-106D-08	18.98	19-24	10.32	8.66	ND[2]	NAPL on probe, moderate tar-like odor	10.77	8.21	ND[2]	Strong tar-like odor. Black-red NAPL coating along tape and probe
MW-107-08	15.30	5-15	5.04	10.26	ND[3]	Slight to moderate tar-like odor.	5.38	9.92	ND	Moderate tar-like odor
MW-108-09	15.47	7-17	--	--	--	--	--	--	--	--
MW-109S-09	15.33	7-17	--	--	--	--	--	--	--	--
MW-109D-09	15.36	28-38	--	--	--	--	--	--	--	--
MW-110-09	16.06	7-17	--	--	--	--	--	--	--	--
MW-111-09	16.06	5-15	--	--	--	--	--	--	--	--
SG-1-09	10.49	NA	--	--	--	--	--	--	--	--
SG-2-09	10.43	NA	--	--	--	--	--	--	--	--

TABLE 2
GROUNDWATER ELEVATIONS AND NAPL MONITORING DATA
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Well ID	Top of Casing Elevation (ft., NGVD)	Screened Interval (ft., BGS)	12/7/2009 Depth to Water (ft., BTOC)	12/7/2009 Water Elevation (ft., NGVD)	12/7/2009 Depth to NAPL (ft., BTOC)	Comments	12/10/2009[5] Depth to Water (ft., BTOC)	12/10/2009[5] Water Elevation (ft., NGVD)	1/21/2010[5] Depth to Water (ft., BTOC)	1/21/2010[5] Water Elevation (ft., NGVD)	2/18/2010[5] Depth to Water (ft., BTOC)	2/18/2010[5] Water Elevation (ft., NGVD)
MW-101-05	16.99	4-14	5.86	11.13	ND	Slight tar-like odor	6.08	10.91	6.42	10.57	6.74	10.25
MW-102-05	15.96	5-20	7.30	8.66	ND	Strong tar-like odor	7.08	8.88	7.18	8.78	7.18	8.78
MW-103-05	17.19	5-20	8.98	8.21	ND	Moderate tar-like odor	8.37	8.82	8.88	8.31	9.07	8.12
MW-104-08	17.14	6-16	7.21	9.93	ND	Slight tar-like odor	7.58	9.56	7.29	9.85	7.59	9.55
MW-105-08	19.10	8-16	11.66	7.44	ND	Moderate tar-like odor	11.61	7.49	11.72	7.38	11.81	7.29
MW-106S-08	19.10	8-18	10.22	8.88	ND[2]	Strong tar-like odor. Black-red-brown NAPL along tape and probe. NAPL partially saturating silt stuck to bottom of probe	11.16	7.94	11.17	7.93	11.15	7.95
MW-106D-08	18.98	19-24	10.75	8.23	ND[2]	Strong tar-like odor. Blebs of black-red-brown NAPL on probe	10.63	8.35	10.77	8.21	10.77	8.21
MW-107-08	15.30	5-15	5.65	9.65	ND	Natural gas odor (mercaptan) coming from open casing. Strong tar-like odor on probe	NM	NA	5.49	9.81	5.58	9.72
MW-108-09	15.47	7-17	8.02	7.45	ND		7.99	7.48	8.22	7.25	8.4	7.07
MW-109S-09	15.33	7-17	7.70	7.63	ND	Slight tar-like odor	7.85	7.48	7.73	7.60	7.54	7.79
MW-109D-09	15.36	28-38	7.37	7.99	ND		7.31	8.05	7.67	7.69	7.72	7.64
MW-110-09	16.06	7-17	8.25	7.81	ND	Slight tar-like odor	7.65	8.41	8.42	7.64	8.27	7.79
MW-111-09	16.06	5-15	7.75	8.31	ND	Slight organic odor	7.72	8.34	7.76	8.30	7.72	8.34
SG-1-09	10.49	NA	NM	NA	NA		3.19	7.30	NM	NA	NM	NA
SG-2-09	10.43	NA	3.38	7.05	NA		3.30	7.13	NM	NA	NM	NA

Notes:
NGVD - National Geodetic Vertical Datum
BGS - Below Ground Surface
BTOC - Below Top of Casing
ND - Not detected with oil/water interface probe
NM - Not measured
NA - Not applicable
(1) - Skim layer of NAPL detected on surface of water. Thickness of layer was not measureable.
(2) - NAPL was not detected with oil/water interface probe, however, upon removal of the probe, a NAPL bleb with a tar-like odor was observed on the end of the probe.
(3) - Specks of sheen and/or NAPL blebs were observed on surface of purge water during groundwater sampling efforts.
(4) - NAPL/tar coating on oil/water interface probe prevented accurate water level and NAPL thickness measurements.
(5) - On this date water levels were measured, but NAPL gauging was not conducted.
-- Not installed at time of measurements

TABLE 3
SUMMARY OF IN-SITU HYDRAULIC CONDUCTIVITY TEST RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location ID	Screened Interval (ft., BGS)	Formation(s) Screened[1,2]	Saturated Formation(s) Adjacent to Screen at Time of Slug Test[2,3]	Test Date	Hydraulic Conductivity (cm/sec)
Water Table Wells					
MW-101-05	4-14	Fill(0.8)/Silt and Clay(5.7)/Glacial Till(3.5)	Silt and Clay/Glacial Till	4/29/2009	3.1E-05
MW-102-05	5-20	Fill(1)/Silt and Clay(14)	Silt and Clay	4/28/2009	7.7E-05
MW-103-05	5-20	Silt and Clay(14)/Glacial Till(1)	Silt and Clay	4/28/2009	9.2E-05
MW-104-08	6-16	Sand and Silt(5)/Glacial Till(5)	Sand and Silt/Glacial Till	4/29/2009	2.3E-05
MW-105-08	8-16	Sand and Silt(10)	Sand and Silt	4/28/2009	2.5E-04
MW-106S-08	8-18	Fill(2.3)/Silt and Sand(7.7)	Fill/Silt and Sand	4/29/2009	4.4E-04
MW-106D-08	19-24	Sand and Gravel(1)/Glacial Till(5)	Sand and Gravel/Glacial Till	4/29/2009	1.9E-04
MW-107-08	5-15	Silt and Sand(10)	Silt and Sand	4/29/2009	1.9E-04
MW-108-09	7-17	Sand and Silt(10)	Sand and Silt	3/16/2010	1.1E-05
MW-109S-09	7-17	Silt and Sand(10)	Silt and Sand	3/16/2010	2.3E-05
MW-109D-09	28-38	Sand and Silt(3.1)/Sand and Gravel(1.6)/Weathered Till(5.3)	Sand and Gravel/Weathered Till	3/16/2010	1.7E-03
MW-110-09	7-17	Fill(1)/Silt and Sand(9)	Silt and Sand	3/16/2010	5.7E-05
MW-111-09	5-10	Fill(5.6)/Sand and Silt(4.4)	Fill/Sand and Silt	3/16/2010	1.4E-03

Notes:
BGS - Below Ground Surface
cm/sec - centimeters per second
(1) - Formation(s) adjacent to screened interval. Value presented in parentheses indicates length of screen in feet adjacent to listed formation(s).
(2) - Silt and Clay units contain some sand and gravel-rich layers.
(3) - Based on depth to water data collected prior to initiation of slug test and composition of materials adjacent to screened interval, formation(s) listed indicates which formation(s) the slug test is representative of.

TABLE 4
SUMMARY OF VISUAL/OLFACTORY FIELD OBSERVATIONS IN SOIL FROM SC AND RI ACTIVITIES
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location	Depth (ft., BGS)	Description
SOIL BORINGS		
B-104-05	4-6	Tar-like odor.
	6-8	Strong tar-like odor.
	8-10	Saturated with water and tar, strong tar-like odor, sheen observed on soils.
B-105-05	4.3-4.5	Strong tar-like odor.
B-106-05	6.2-8	Tar-like odor, very faint sheen .
	8-10.2	Tar-like odor, pockets of sheen.
	10.2-10.3	Pockets of brown tar.
	10.3-12	Tar-like odor, pockets of sheen.
	12-15	Faint tar-like odor.
B-107-08		No observations or odor indicative of MGP-related materials.
B-108-08	4.4	Strong tar-like odor.
	6.4	Strong fuel-like odor.
	8.3	Strong fuel-like odor in gravel zone.
	8.7	Moderate hydrocarbon odor.
B-109-08	14-16	Sheen observed on outside of spoon, but not within soils when broken apart. Slight tar-like odor.
B-110-08	8.2	Slight sheen observed on soils.
	13	Partially saturated with NAPL/tar in gravelly zone.
	14-14.9	Sheen observed throughout, NAPL/tar on outside of spoon.
	16.4	Gravel seam coated with NAPL.
	16.9	Moderate tar-like odor.
	18	Strong tar-like odor.
	19	Sheen observed on soil.
B-111-08	8.5	Slight fuel-like odor.
	10	Slight fuel-like odor.
	13.5	NAPL coating on gravel grains, moderate tar-like odor throughout.
	14.2	NAPL coating coarser sand grains.
	15.2	NAPL coating coarser sand grains.
	16.7	Sheen observed on soils.
	17	Sheen observed on soils, slight tar-like odor.
	18.7	NAPL blebs on coarser material.
B-112-08	8-12	Strong hydrocarbon odor.
B-113-09	5.2-5.8	Slight hydrocarbon odor
	5.8-7.8	Strong tar-like odor.
	7.1-7.8	Blebs of red-black NAPL.

TABLE 4
SUMMARY OF VISUAL/OLFACTORY FIELD OBSERVATIONS IN SOIL FROM SC AND RI ACTIVITIES
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location	Depth (ft., BGS)	Description
	7.8-8.0	Saturated with groundwater and red-brown NAPL, strong tar-like odor.
	8.0-9.3	Strong tar-like odor.
B-114-09	6.5-7.2	Sheen present, tar-like odor
	8.8-9.6	Strong tar-like odor.
	9.6-9.8	Brown NAPL blebs found throughout, strong tar-like odor.
	12.0-12.7	Brown NAPL blebs found throughout, strong tar-like odor.
B-115-09	10.0-11.3	Scattered sheen on water, slight tar-like odor.
	16.0-16.9	Faint tar-like odor.
B-116-09	10.9-11.4	Scattered sheen and trace NAPL blebs, tar-like odor
	12.0-12.9	Scattered sheen on grains, tar-like odor
	13.2-13.6	Soils partially saturated in red-black NAPL, tar-like odor
B-117-09		No observations or odor indicative of MGP-related materials.
SOIL BORINGS AT MONITORING WELL LOCATIONS		
MW-101-05		No observations or odor indicative of MGP-related materials.
MW-102-05	3.8-4	Tar-like odor
	8-10	Blebs of light-colored NAPL, petroleum-like odor. Few blebs of tar around gravel, intermittent sheen.
	10-12	Blebs of brown-red tar, strong tar-like odor.
	12-13.5	Tar around gravel
	14-18	Occasional tar on gravel, moderate sheen, strong tar-like odor.
	18-20	Frequent brown-red tar throughout, heavy sheen, very strong tar-like odor.
	21.4	String of tar.
MW-103-05	12-14	Tar coats gravel in veins throughout soil, strong tar-like odor
	14-19	Saturated with water and tar, strong tar-like odor, sheen observed on soils.
	19-20	Occasional tar near gravel, tar-like odor, sheen.
	20-21.5	Sheen observed on outside of soils, but not within soils when broken apart.
MW-104-08	9-11	Slight hydrocarbon odor.
	13-15	Sheen observed on outside of spoon.

TABLE 4
SUMMARY OF VISUAL/OLFACTORY FIELD OBSERVATIONS IN SOIL FROM SC AND RI ACTIVITIES
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location	Depth (ft., BGS)	Description
MW-105-08	10.9-11.3	Sheen observed on soils.
	11.1	Sporadic blebs of NAPL and sheen observed on coarse sand and gravel, moderate tar-like odor.
	15	Slight tar-like odor.
	20.4	Very slight hydrocarbon odor.
MW-106D-08	12.5	Slight tar-like and organic odor.
	14.6	Abundant sheen, red-black NAPL bleb.
	16	Moderate tar-like odor.
	18	Sheen on cobble.
	20	Moderate to strong tar-like odor.
	22	Sheen, tar-like odor.
	24	Abundant sheen with occasional red-brown NAPL blebs.
MW-106S-08	16-18	Sheen observed on soils and in water in spoon, tar-like odor.
	18.25	Sheen observed on soils, tar-like odor.
	20	Tar-like odor, very slight sheen.
	22.9-25.6	Coarse grains soils partially saturated with NAPL, tar-like odor.
	24	Partially saturated with NAPL, NAPL blebs on outside of spoon.
MW-107-08	5.2	Very slight hydrocarbon odor.
	7-9	Slight fuel-like odor.
	9-11	Abundant sheen observed on coarser grained soils, sparse blebs of black-red NAPL. Moderate tar-like odor.
	11-13	Strong fuel-like/hydrocarbon odor, occasional slight sheen.
	13-15	Slight hydrocarbon odor.
MW-108-09		No observations or odor indicative of MGP-related materials.
MW-109S-09		Refer to observations recorded for MW-109D-09
MW-109D-09		No observations or odor indicative of MGP-related materials.
MW-110-09	18-20	PID reading of 92 ppm from soils in interval
MW-111-09	10.0-10.6	Sheen on water inside spoon. Trace red-brown-black NAPL blebs, slight tar-like odor.
	10.6-11.2	Slight tar-like odor.
	14.0-14.3	Occasional sheen on water inside spoon. Slight tar-like odor.

TABLE 4
SUMMARY OF VISUAL/OLFACTORY FIELD OBSERVATIONS IN SOIL FROM SC AND RI ACTIVITIES
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location	Depth (ft., BGS)	Description
TEST PITS		
TP-101-05	4.1-7.8	Petroleum-like odor.
TP-102-05	2.4-4.2	Strong tar-like odor and sheen.
	7-7.1	NAPL blebs.
TP-103-05	2.8-4.9	Slight sulfur-like odor, potential purifier waste material.
	10.4	NAPL blebs.
TP-104-05	7-8.4	NAPL blebs.
	8.4	NAPL seep.
	8.4-9.3	NAPL blebs.
TP-105-08	5-10	Viscous black NAPL/tar, strong tar-like odor.
SOIL VAPOR PROBES		
SV-1-09		No observations or odor indicative of MGP-related materials.
SV-2-09		No observations or odor indicative of MGP-related materials.
SV-3-09		No observations or odor indicative of MGP-related materials.
SV-4-09		No observations or odor indicative of MGP-related materials.
SV-5-09		No observations or odor indicative of MGP-related materials.

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]										
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	B-113-09 7.5-8.5 11/18/2009	B-113-09 10-11 11/18/2009	B-114-09 8.5-9.5 11/18/2009	B-114-09 13-15 11/18/2009	B-115-09 10-12 11/11/2009	B-115-09 18-20 11/11/2009	B-116-09 11-12 11/10/2009
Volatile Organic Compounds (VOCs)											
BTEX											
Benzene	2.9	70	0.06	mg/kg	0.017 U	0.00011 UJ	0.012 J	0.0013 J	0.0016	0.00049 J	0.00012 UJ
Toluene	100	36	0.7	mg/kg	0.04 U	0.00037 J	0.0078 J	0.0006 J	0.00097 J	0.00063 J	0.0033 J
Ethylbenzene	30	NE	1	mg/kg	0.15 J	0.00032 UJ	0.081	0.0018 J	0.0042 J	0.00046 J	0.00049 J
o-Xylene	NE	NE	NE	mg/kg	0.13 J	0.0005 UJ	0.054 J	0.0028 J	0.0032 J	0.00063 J	0.00054 UJ
m&p-Xylenes	NE	NE	NE	mg/kg	0.085 U	0.00057 UJ	0.015 J	0.0016 J	0.002 J	0.0012 J	0.00066 J
Xylenes, Total	100	0.26	1.6	mg/kg	0.13	ND	0.069	0.0044	0.0052	0.00183	0.00066
Total BTEX	NE	NE	NE	mg/kg	0.28	0.00037	0.17	0.0081	0.012	0.0034	0.0045
Other VOCs											
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.059 U	0.00039 UJ	0.0021 U	0.00046 UJ	0.00055 U	0.00042 U	0.00042 UJ
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.052 U	0.00035 UJ	0.0019 U	0.00041 UJ	0.00049 U	0.00037 U	0.00038 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	NE	mg/kg	0.1 U	0.00066 UJ	0.0036 U	0.00078 UJ	0.00095 U	0.00072 U	0.00072 UJ
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.044 U	0.00029 UJ	0.0016 U	0.00034 UJ	0.00041 U	0.00031 U	0.00032 UJ
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.093 U	0.00062 UJ	0.0033 U	0.00073 UJ	0.00088 U	0.00067 U	0.00068 UJ
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.067 U	0.00044 UJ	0.0024 U	0.00052 UJ	0.00063 U	0.00048 U	0.00048 UJ
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.22 U	0.0015 UJ	0.0076 U	0.0017 UJ	0.0021 U	0.0016 U	0.0016 UJ
1,2-Dibromo-3-chloropropane	NE	NE	NE	mg/kg	0.14 U	0.0009 UJ	0.0048 U	0.0011 UJ	0.0013 U	0.00097 U	0.00098 UJ
1,2-Dibromoethane	NE	NE	NE	mg/kg	0.039 U	0.00026 UJ	0.0014 U	0.0003 UJ	0.00037 U	0.00028 U	0.00028 UJ
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.064 U	0.00042 UJ	0.0023 U	0.0005 UJ	0.0006 U	0.00069 J	0.00046 UJ
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.057 U	0.00038 UJ	0.002 U	0.00045 UJ	0.00054 U	0.00041 U	0.00041 UJ
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.069 U	0.00046 UJ	0.0024 U	0.00054 UJ	0.00065 U	0.00049 U	0.0005 UJ
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.085 U	0.00057 UJ	0.003 U	0.00067 UJ	0.00081 U	0.00061 U	0.00062 UJ
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.087 U	0.00058 UJ	0.0031 U	0.00068 UJ	0.00082 U	0.00062 U	0.00063 UJ
2-Butanone (MEK)	100	100	0.12	mg/kg	0.24 U	0.0016 UJ	0.0082 U	0.0026 J	0.0074 J	0.0017 U	0.0029 J
2-Hexanone	NE	NE	NE	mg/kg	0.19 U	0.0013 UJ	0.0065 U	0.0015 UJ	0.0018 U	0.0014 U	0.0014 UJ
4-Methyl-2-pentanone	NE	NE	NE	mg/kg	0.2 U	0.0014 UJ	0.0071 U	0.0016 UJ	0.0019 U	0.0015 U	0.0015 UJ
Acetone	100	2.2	0.05	mg/kg	0.14 UJ	0.0091 UJ	0.0048 U	0.0011 UJ	0.023	0.0098 U	0.00099 UJ
Bromodichloromethane	NE	NE	NE	mg/kg	0.07 U	0.00047 UJ	0.0025 U	0.00055 UJ	0.00066 U	0.0005 U	0.00051 UJ
Bromoform	NE	NE	NE	mg/kg	0.07 U	0.00047 UJ	0.0025 U	0.00055 UJ	0.00066 U	0.0005 U	0.00051 UJ
Bromomethane	NE	NE	NE	mg/kg	0.077 U	0.00051 UJ	0.0027 U	0.0021 J	0.00073 U	0.00055 U	0.00056 UJ

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]										
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	B-113-09 7.5-8.5 11/18/2009	B-113-09 10-11 11/18/2009	B-114-09 8.5-9.5 11/18/2009	B-114-09 13-15 11/18/2009	B-115-09 10-12 11/11/2009	B-115-09 18-20 11/11/2009	B-116-09 11-12 11/10/2009
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.042 U	0.00028 UJ	0.0015 U	0.00033 UJ	0.0004 U	0.0003 U	0.0003 UJ
Carbon disulfide	NE	NE	NE	mg/kg	0.044 U	0.00029 UJ	0.0049 J	0.00043 J	0.0025 J	0.0005 J	0.0014 J
Chlorobenzene	100	40	1.1	mg/kg	0.047 U	0.00031 UJ	0.0017 U	0.00037 UJ	0.00044 U	0.00047 J	0.00034 UJ
Chloroethane	NE	NE	NE	mg/kg	0.065 U	0.00043 UJ	0.0023 U	0.00051 UJ	0.00062 U	0.00047 U	0.00047 UJ
Chloroform	10	12	0.37	mg/kg	0.085 U	0.00057 UJ	0.003 U	0.00067 UJ	0.00081 U	0.00061 U	0.00062 UJ
Chloromethane	NE	NE	NE	mg/kg	0.049 U	0.00032 UJ	0.0017 U	0.0033 J	0.00069	0.00078 J	0.00035 UJ
Cyclohexane	NE	NE	NE	mg/kg	0.047 U	0.00031 UJ	0.0019 J	0.00037 UJ	0.00044 U	0.00046 J	0.00034 UJ
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.077 U	0.00051 UJ	0.0027 U	0.0006 UJ	0.00073 U	0.00055 U	0.00056 UJ
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.044 U	0.00029 UJ	0.0016 U	0.00034 UJ	0.00041 U	0.00031 U	0.00032 UJ
Dibromochloromethane	NE	NE	NE	mg/kg	0.034 U	0.00022 UJ	0.0012 U	0.00026 UJ	0.00032 U	0.00024 U	0.00024 UJ
Dichlorodifluoromethane	NE	NE	NE	mg/kg	0.11 UJ	0.0007 UJ	0.0037 U	0.00082 UJ	0.00099 UJ	0.00075 UJ	0.00076 UJ
Isopropylbenzene	NE	NE	NE	mg/kg	0.42 J	0.00022 UJ	0.15	0.0022 J	0.018	0.00056 J	0.0015 J
Methyl acetate	NE	NE	NE	mg/kg	0.11 U	0.0012 J	0.0038 U	0.00084 UJ	0.0011 U	0.00076 U	0.0015 J
Methylcyclohexane	NE	NE	NE	mg/kg	0.04 U	0.00027 UJ	0.0028 J	0.00032 UJ	0.0014 J	0.00057 J	0.00046 J
Methylene chloride	51	12	0.05	mg/kg	0.082 U	0.00054 UJ	0.0029 U	0.00064 UJ	0.00077 U	0.00059 U	0.00059 UJ
tert-Butyl Methyl Ether	62	NE	0.93	mg/kg	0.047 U	0.00031 UJ	0.0017 U	0.00037 UJ	0.00044 U	0.00036 J	0.00034 UJ
Styrene	NE	NE	NE	mg/kg	0.062 U	0.00041 UJ	0.0043 J	0.00048 UJ	0.00059 U	0.00044 U	0.0018 J
Tetrachloroethene	5.5	2	1.3	mg/kg	0.065 U	0.00043 UJ	0.0023 U	0.00051 UJ	0.00062 U	0.00047 U	0.00047 UJ
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.082 U	0.00054 UJ	0.0029 U	0.00064 UJ	0.00077 U	0.00059 U	0.00059 UJ
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.042 U	0.00028 UJ	0.0015 U	0.00033 UJ	0.0004 U	0.0003 U	0.0003 UJ
Trichloroethene	10	2	0.47	mg/kg	0.05 U	0.00033 UJ	0.0018 U	0.00039 UJ	0.00048 U	0.00065 J	0.00036 UJ
Trichlorofluoromethane	NE	NE	NE	mg/kg	0.042 U	0.00028 UJ	0.0015 U	0.00033 UJ	0.0004 U	0.00043 J	0.0003 UJ
Vinyl chloride	0.21	NE	0.02	mg/kg	0.13 U	0.00082 UJ	0.0044 U	0.00096 UJ	0.0012 UJ	0.00088 UJ	0.00089 UJ
Semi-volatile Organic Compounds (SVOCs)											
Polycyclic Aromatic Hydrocarbons (PAHs)											
Acenaphthene	100	20	98	mg/kg	**42**	0.0015 U	18	0.0018 U	0.31 J	0.0016 U	0.21 J
Acenaphthylene	100	NE	107	mg/kg	0.053 U	0.0011 U	0.024 U	0.0013 U	0.32 J	0.0012 U	0.25 J
Anthracene	100	NE	1000	mg/kg	27	0.00085 U	10	0.001 U	1.2 J	0.00092 U	0.18 J
Benzo(a)anthracene	1	NE	1	mg/kg	**18 J**	0.0012 U	**6.7 J**	0.026 J	**5.8**	0.043 J	**2.1**
Benzo(a)pyrene	1	2.6	22	mg/kg	**14 J**	0.0014 U	**5.5 J**	0.0017 U	**7.3**	0.05 J	**1.9**
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	**6.6 J**	0.0027 U	**2.6 J**	0.0031 U	**4.8**	0.039 J	0.76

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]										
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	B-113-09 7.5-8.5 11/18/2009	B-113-09 10-11 11/18/2009	B-114-09 8.5-9.5 11/18/2009	B-114-09 13-15 11/18/2009	B-115-09 10-12 11/11/2009	B-115-09 18-20 11/11/2009	B-116-09 11-12 11/10/2009
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	6.3 J	0.00084 U	2.7 J	0.00099 U	7.3	0.00091 U	1.1
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	**6.7 J**	0.0015 U	**2.9 J**	0.0018 U	**4.6**	0.042 J	0.91
Chrysene	1	NE	1	mg/kg	**17 J**	0.0005 U	**6.9 J**	0.025 J	**5.4**	0.038 J	**2**
Dibenzo(a,h)anthracene	0.33	NE	1000	mg/kg	0.03 U	0.00062 U	0.014 U	0.00073 U	**2.2**	0.00067 U	0.27 J
Fluoranthene	100	NE	1000	mg/kg	33	0.0023 U	13	0.0027 U	6.6	0.059 J	3.7
Fluorene	100	30	386	mg/kg	21	0.0024 U	8.3	0.0029 U	0.38 J	0.0026 U	0.0027 U
Indeno(1,2,3-cd)pyrene	0.5	NE	8.2	mg/kg	**4.8 J**	0.0005 U	**2 J**	0.00059 U	**7**	0.00054 U	**0.82**
Naphthalene	100	NE	12	mg/kg	4.7 J	0.038 J	2.7 J	0.18 J	0.87 J	0.044 J	0.0013 U
Phenanthrene	100	NE	1000	mg/kg	89	0.039 J	35	0.081 J	3.2	0.0008 U	0.00081 U
Pyrene	100	NE	1000	mg/kg	46	0.028 J	19	0.057 J	6.4	0.051 J	5.1
2-Methylnaphthalene	NE	NE	NE	mg/kg	2.7 J	0.0013 U	1.3 J	0.0015 U	0.19 J	0.0014 U	0.0014 U
Total PAHs	NE	NE	NE	mg/kg	339	0.11	137	0.37	64	0.37	19
Other SVOCs											
Biphenyl	NE	NE	NE	mg/kg	4.8 J	0.0016 U	0.75 J	0.0019 U	0.0068 U	0.0017 U	0.0018 U
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	0.095 U	0.002 U	0.042 U	0.0023 U	0.0084 U	0.0021 U	0.0022 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	0.15 U	0.0031 U	0.065 U	0.0037 U	0.014 U	0.0033 U	0.0034 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	0.056 U	0.0012 U	0.025 U	0.0014 U	0.005 U	0.0013 U	0.0013 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	0.15 U	0.003 U	0.064 U	0.0036 U	0.013 U	0.0033 U	0.0033 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	0.19 UJ	0.0039 UJ	0.082 UJ	0.0046 UJ	0.017 UJ	0.0042 UJ	0.0042 UJ
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	0.15 UJ	0.003 UJ	0.063 UJ	0.0035 UJ	0.013 U	0.0032 U	0.0033 U
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	0.068 U	0.0014 U	0.03 U	0.0017 U	0.006 U	0.0016 U	0.0016 U
2-Chloronaphthalene	NE	NE	NE	mg/kg	0.071 U	0.0015 U	0.031 U	0.0018 U	0.0063 U	0.0016 U	0.0016 U
2-Chlorophenol	NE	NE	NE	mg/kg	0.064 U	0.0014 U	0.029 U	0.0016 U	0.0057 U	0.0015 U	0.0015 U
2-Methylphenol	100	NE	0.33	mg/kg	0.089 U	0.0019 U	0.04 U	0.0022 U	0.0079 U	0.002 U	0.0021 U
2-Nitroaniline	NE	NE	NE	mg/kg	0.15 U	0.0031 U	0.065 U	0.0036 U	0.013 U	0.0033 U	0.0034 U
2-Nitrophenol	NE	NE	NE	mg/kg	0.16 U	0.0033 U	0.069 U	0.0039 U	0.014 U	0.0035 U	0.0036 U
3,3'-Dichlorobenzidine	NE	NE	NE	mg/kg	0.088 U	0.0019 U	0.039 U	0.0022 U	0.0078 U	0.002 U	0.002 U
3-Nitroaniline	NE	NE	NE	mg/kg	0.17 U	0.0035 U	0.073 U	0.0041 U	0.015 U	0.0037 U	0.0038 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	0.13 UJ	0.0027 UJ	0.057 UJ	0.0032 UJ	0.012 UJ	0.0029 UJ	0.0029 UJ
4-Bromophenyl-phenylether	NE	NE	NE	mg/kg	0.049 U	0.0011 U	0.022 U	0.0012 U	0.0043 U	0.0011 U	0.0011 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.13 U	0.0027 U	0.057 U	0.0032 U	0.012 U	0.0029 U	0.0029 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]										
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	B-113-09 7.5-8.5 11/18/2009	B-113-09 10-11 11/18/2009	B-114-09 8.5-9.5 11/18/2009	B-114-09 13-15 11/18/2009	B-115-09 10-12 11/11/2009	B-115-09 18-20 11/11/2009	B-116-09 11-12 11/10/2009
4-Chloroaniline	NE	NE	NE	mg/kg	0.027 U	0.00054 U	0.012 U	0.00064 U	0.0024 U	0.00059 U	0.0059 U
4-Chlorophenyl-phenylether	NE	NE	NE	mg/kg	0.094 U	0.002 U	0.042 U	0.0023 U	0.0083 U	0.0021 U	0.0022 U
4-Nitroaniline	NE	NE	NE	mg/kg	0.19 U	0.0039 U	0.083 U	0.0046 U	0.017 U	0.0042 U	0.0043 U
4-Methylphenol	34	NE	0.33	mg/kg	0.046 U	0.00095 U	0.021 U	0.0012 U	0.0041 U	0.0011 U	0.0011 U
4-Nitrophenol	NE	NE	NE	mg/kg	0.11 U	0.0023 U	0.049 U	0.0027 U	0.0098 U	0.0025 UJ	0.0025 UJ
Acetophenone	NE	NE	NE	mg/kg	0.059 U	0.0013 U	0.026 U	0.0015 U	0.0053 U	0.0014 U	0.0014 U
Atrazine	NE	NE	NE	mg/kg	0.065 U	0.0014 U	0.029 U	0.0016 U	0.0057 U	0.0015 UJ	0.0015 U
Benzaldehyde	NE	NE	NE	mg/kg	0.08 U	0.0017 U	0.035 U	0.002 U	0.0071 U	0.0018 U	0.0018 U
Bis(1-Chloroisopropyl) Ether	NE	NE	NE	mg/kg	0.029 U	0.00059 U	0.013 U	0.00069 U	0.0025 U	0.00063 U	0.00064 U
bis(2-Chloroethoxy) Methane	NE	NE	NE	mg/kg	0.05 U	0.0011 U	0.022 U	0.0013 U	0.0044 U	0.0012 U	0.0012 U
Bis(-2-chloroethyl)ether	NE	NE	NE	mg/kg	0.18 U	0.0036 U	0.076 U	0.0042 U	0.016 U	0.0039 U	0.0039 U
Bis(2-ethylhexyl)phthalate	NE	NE	NE	mg/kg	0.034 U	0.0007 U	0.015 U	0.00082 U	0.003 U	0.00075 U	0.0076 U
Caprolactam	NE	NE	NE	mg/kg	0.12 U	0.0025 U	0.052 U	0.0029 U	0.011 U	0.0026 UJ	0.0027 U
Carbazole	NE	NE	NE	mg/kg	0.019 U	0.00039 U	0.0082 U	0.00046 U	0.38 J	0.00042 U	0.0013 U
Dibenzofuran	14	NE	210	mg/kg	4.3 J	0.002 U	0.042 U	0.0023 U	0.26 J	0.0021 U	0.0022 U
Benzyl Butyl Phthalate	NE	NE	NE	mg/kg	0.051 U	0.0011 U	0.023 U	0.0013 U	0.0045 U	0.0012 U	0.0012 U
Diethylphthalate	NE	NE	NE	mg/kg	0.064 U	0.0014 U	0.028 U	0.0016 U	0.0057 U	0.0015 U	0.0015 U
Dimethyl phthalate	NE	NE	NE	mg/kg	0.065 U	0.0014 U	0.029 U	0.0016 U	0.0058 U	0.0015 U	0.0015 U
Di-n-butylphthalate	NE	NE	NE	mg/kg	0.05 U	0.0011 U	0.022 U	0.0013 U	0.0044 U	0.0012 U	0.00094 J
Di-n-octyl phthalate	NE	NE	NE	mg/kg	0.068 U	0.0015 U	0.03 U	0.0017 U	0.0061 U	0.0016 U	0.0016 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	0.042 U	0.00086 U	0.019 U	0.0011 U	0.0037 U	0.00093 U	0.00094 U
Hexachlorobutadiene	NE	NE	NE	mg/kg	0.046 U	0.00095 U	0.021 U	0.0012 U	0.0041 U	0.0011 U	0.0011 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	0.092 U	0.002 U	0.041 U	0.0023 U	0.0082 U	0.0021 U	0.0021 U
Hexachloroethane	NE	NE	NE	mg/kg	0.078 U	0.0017 U	0.035 U	0.0019 U	0.0069 U	0.0018 U	0.0018 U
Isophorone	NE	NE	NE	mg/kg	0.098 U	0.0021 U	0.043 U	0.0024 U	0.0087 U	0.0022 U	0.0023 U
Nitrobenzene	NE	NE	NE	mg/kg	0.059 U	0.0013 U	0.026 U	0.0015 U	0.0053 U	0.0014 U	0.0014 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	0.065 U	0.0014 U	0.029 U	0.0016 U	0.0057 U	0.0015 U	0.0015 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	0.078 U	0.0016 U	0.034 U	0.0019 U	0.0069 U	0.0018 U	0.0018 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	0.064 UJ	0.0014 UJ	0.028 UJ	0.0016 UJ	0.0057 UJ	0.0015 UJ	0.0015 UJ
Phenol	100	30	0.33	mg/kg	0.07 U	0.0015 U	0.031 U	0.0017 U	0.0062 U	0.0016 U	0.0016 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]										
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	B-113-09 7.5-8.5 11/18/2009	B-113-09 10-11 11/18/2009	B-114-09 8.5-9.5 11/18/2009	B-114-09 13-15 11/18/2009	B-115-09 10-12 11/11/2009	B-115-09 18-20 11/11/2009	B-116-09 11-12 11/10/2009
Inorganic Constituents											
Total Cyanide	27	NE	40	mg/kg	1.4	0.91 U	0.91 U	1.1 U	1.2 U	0.91 U	0.91 U
Cyanide, Free	NE	NE	NE	mg/kg	0.0916 J	0.0156 UJ	0.0171 UJ	0.0174 UJ	0.0234 U	0.0169 U	0.0174 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the quantitation limit but above the method detection limit.
UJ - The analyte was not detected above the reported sample quantitation limit. However, based on data validation, the reported method detection limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.

NE - Not established.
ND - Not detected.
(a) - R-3 Zoning Classification (multi-family residential) per City of Rensselaer Planning and Building Department.

Boxed concentrations are above one or more of the following New York State Subpart 375 Soil Cleanup Objectives for: Residential Zoning, Protection of Ecological Resources, or Protection of Groundwater.

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Soil Cleanup Objectives [6 NYCRR Subpart 375-6] Protection of Public Health - Residential Zoning[a]	Protection of Ecological Resources	Protection of Groundwater	Units	B-116-09 13-14 11/10/2009	B-117-09 8-10 11/11/2009	B-117-09 10-12 11/11/2009	MW-108-09 16-18 11/17/2009	MW-108-09 22-24 11/17/2009	MW-109D-09 14-16 11/18/2009
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	2.9	70	0.06	mg/kg	0.00012 U	0.00012 U	0.00012 U	0.00014 U	0.00018 U	0.00014 U
Toluene	100	36	0.7	mg/kg	0.00086 J	0.0013 J	0.00065 J	0.00064 J	0.00073 J	0.00059 J
Ethylbenzene	30	NE	1	mg/kg	0.013	0.00033 U	0.00033 U	0.0004 U	0.00052 U	0.00039 U
o-Xylene	NE	NE	NE	mg/kg	0.0081 J	0.00051 U	0.00051 U	0.00062 U	0.00081 U	0.0006 U
m&p-Xylenes	NE	NE	NE	mg/kg	0.0024 J	0.00074 J	0.00058 U	0.0007 U	0.00092 U	0.00068 U
Xylenes, Total	100	0.26	1.6	mg/kg	0.0105	0.00074	ND	ND	ND	ND
Total BTEX	NE	NE	NE	mg/kg	0.035	0.0020	0.00065	0.00064	0.00073	0.00059
Other VOCs										
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.00041 U	0.0004 U	0.0004 U	0.00048 U	0.00063 U	0.00047 U
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.00036 U	0.00035 U	0.00035 U	0.00043 U	0.00056 U	0.00042 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	NE	mg/kg	0.0007 U	0.00068 U	0.00068 U	0.00082 U	0.0011 U	0.0008 U
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.00031 U	0.0003 U	0.0003 U	0.00036 U	0.00047 U	0.00035 U
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.00065 U	0.00063 U	0.00063 U	0.00077 U	0.0011 U	0.00075 U
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.00047 U	0.00045 U	0.00045 U	0.00055 U	0.00072 U	0.00054 U
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.0016 U	0.0015 U	0.0015 U	0.0018 U	0.0024 U	0.0018 U
1,2-Dibromo-3-chloropropane	NE	NE	NE	mg/kg	0.00094 U	0.00091 U	0.00091 U	0.0012 U	0.0015 U	0.0011 U
1,2-Dibromoethane	NE	NE	NE	mg/kg	0.00027 U	0.00026 U	0.00026 U	0.00032 U	0.00042 U	0.00031 U
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.00045 U	0.00043 U	0.00043 U	0.00052 U	0.00069 U	0.00051 U
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.0004 U	0.00039 U	0.00039 U	0.00047 U	0.00061 U	0.00046 U
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.00048 U	0.00046 U	0.00046 U	0.00056 U	0.00074 U	0.00055 U
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.0006 U	0.00058 U	0.00058 U	0.0007 U	0.00092 U	0.00068 U
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.00061 U	0.00059 U	0.00059 U	0.00071 U	0.00094 U	0.0007 U
2-Butanone (MEK)	100	100	0.12	mg/kg	0.0018 J	0.0016 U	0.0016 U	0.002 U	0.04	0.0019 U
2-Hexanone	NE	NE	NE	mg/kg	0.0013 U	0.0013 U	0.0013 U	0.0015 U	0.002 U	0.0015 U
4-Methyl-2-pentanone	NE	NE	NE	mg/kg	0.0014 U	0.0014 U	0.0014 U	0.0017 U	0.0022 U	0.0016 U
Acetone	100	2.2	0.05	mg/kg	0.00096 U	0.00092 UJ	0.00092 U	0.0012 UJ	**0.16 J**	0.0011 U
Bromodichloromethane	NE	NE	NE	mg/kg	0.00049 U	0.00048 U	0.00047 U	0.00058 U	0.00076 U	0.00056 U
Bromoform	NE	NE	NE	mg/kg	0.00049 U	0.00048 U	0.00047 U	0.00058 U	0.00076 U	0.00056 U
Bromomethane	NE	NE	NE	mg/kg	0.00054 U	0.00052 U	0.00052 U	0.00063 U	0.00083 U	0.00062 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Soil Cleanup Objectives [6 NYCRR Subpart 375-6] Protection of Public Health - Residential Zoning[a]	Protection of Ecological Resources	Protection of Groundwater	Units	B-116-09 13-14 11/10/2009	B-117-09 8-10 11/11/2009	B-117-09 10-12 11/11/2009	MW-108-09 16-18 11/17/2009	MW-108-09 22-24 11/17/2009	MW-109D-09 14-16 11/18/2009
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.00029 U	0.00029 U	0.00028 U	0.00034 U	0.00045 U	0.00034 U
Carbon disulfide	NE	NE	NE	mg/kg	0.00031 UJ	0.00052 J	0.0003 UJ	0.00036 U	0.0012 J	0.00035 U
Chlorobenzene	100	40	1.1	mg/kg	0.00033 U	0.00032 U	0.00032 U	0.00039 U	0.00051 U	0.00038 U
Chloroethane	NE	NE	NE	mg/kg	0.00046 U	0.00044 U	0.00044 U	0.00053 U	0.0007 U	0.00052 U
Chloroform	10	12	0.37	mg/kg	0.0006 U	0.00058 U	0.00058 U	0.0007 U	0.00092 U	0.00068 U
Chloromethane	NE	NE	NE	mg/kg	0.00034 U	0.00033 U	0.00033 U	0.0004 U	0.00052 U	0.00039 U
Cyclohexane	NE	NE	NE	mg/kg	0.00033 U	0.00032 U	0.00032 U	0.00039 U	0.00051 U	0.00038 U
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.00054 U	0.00052 U	0.00052 U	0.00063 U	0.00083 U	0.00062 U
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00031 U	0.0003 U	0.0003 U	0.00036 U	0.00047 U	0.00035 U
Dibromochloromethane	NE	NE	NE	mg/kg	0.00024 U	0.00023 U	0.00023 U	0.00028 U	0.00036 U	0.00027 U
Dichlorodifluoromethane	NE	NE	NE	mg/kg	0.00074 UJ	0.00071 UJ	0.00071 UJ	0.00086 UJ	0.0012 UJ	0.00084 U
Isopropylbenzene	NE	NE	NE	mg/kg	0.021	0.00023 U	0.00023 U	0.00028 U	0.00036 U	0.00027 U
Methyl acetate	NE	NE	NE	mg/kg	0.00075 U	0.0015 J	0.00072 U	0.00087 U	0.0026 J	0.00086 U
Methylcyclohexane	NE	NE	NE	mg/kg	0.00083 J	0.00027 U	0.00027 U	0.00033 U	0.00044 U	0.00032 U
Methylene chloride	51	12	0.05	mg/kg	0.00057 U	0.00055 U	0.00055 U	0.00067 U	0.00088 U	0.00066 U
tert-Butyl Methyl Ether	62	NE	0.93	mg/kg	0.00033 U	0.00032 U	0.00032 U	0.00039 U	0.00051 U	0.00038 U
Styrene	NE	NE	NE	mg/kg	0.00043 J	0.00042 U	0.00042 U	0.00051 U	0.00067 U	0.0005 U
Tetrachloroethene	5.5	2	1.3	mg/kg	0.00046 U	0.00044 U	0.00044 U	0.00053 U	0.0007 U	0.00052 U
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.00057 U	0.00055 U	0.00055 U	0.00067 U	0.00088 U	0.00066 U
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00029 U	0.00029 U	0.00028 U	0.00034 U	0.00045 U	0.00034 U
Trichloroethene	10	2	0.47	mg/kg	0.00035 U	0.00034 U	0.00034 U	0.00041 U	0.00054 U	0.0004 U
Trichlorofluoromethane	NE	NE	NE	mg/kg	0.00029 U	0.00029 U	0.00028 U	0.00034 U	0.00045 U	0.00034 U
Vinyl chloride	0.21	NE	0.02	mg/kg	0.00086 UJ	0.00083 U	0.00083 UJ	0.0011 U	0.0014 U	0.00099 U
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	100	20	98	mg/kg	17	0.0015 U	0.0015 U	0.0019 U	0.0024 U	0.0018 U
Acenaphthylene	100	NE	107	mg/kg	1.7 J	0.0012 U	0.0012 U	0.0014 U	0.0018 U	0.0014 U
Anthracene	100	NE	1000	mg/kg	13	0.00087 U	0.00087 U	0.0011 U	0.0014 U	0.0011 U
Benzo(a)anthracene	1	NE	1	mg/kg	**10**	0.0013 U	0.0013 U	0.12 J	0.002 U	0.0015 U
Benzo(a)pyrene	1	2.6	22	mg/kg	**9.4**	0.0014 U	0.0014 U	0.1 J	0.0023 U	0.0017 U
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	**4.3 J**	0.0027 U	0.0027 U	0.074 J	0.0043 U	0.0032 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Soil Cleanup Objectives [6 NYCRR Subpart 375-6] Protection of Public Health - Residential Zoning[a]	Protection of Ecological Resources	Protection of Groundwater	Units	B-116-09 13-14 11/10/2009	B-117-09 8-10 11/11/2009	B-117-09 10-12 11/11/2009	MW-108-09 16-18 11/17/2009	MW-108-09 22-24 11/17/2009	MW-109D-09 14-16 11/18/2009
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	4.4 J	0.00086 U	0.00086 U	0.0011 U	0.0014 U	0.0011 U
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	**4.1 J**	0.0015 U	0.0015 U	0.068 J	0.0024 U	0.0018 U
Chrysene	1	NE	1	mg/kg	**9.9**	0.00051 U	0.00051 U	0.12 J	0.00081 U	0.0006 U
Dibenzo(a,h)anthracene	0.33	NE	1000	mg/kg	0.013 U	0.00063 U	0.00063 U	0.00077 U	0.0011 U	0.00075 U
Fluoranthene	100	NE	1000	mg/kg	20	0.0023 U	0.0023 U	0.24 J	0.0037 U	0.0027 U
Fluorene	100	30	386	mg/kg	7 J	0.0025 U	0.0025 U	0.003 U	0.0039 U	0.0029 U
Indeno(1,2,3-cd)pyrene	0.5	NE	8.2	mg/kg	**3.5 J**	0.00051 U	0.00051 U	0.071 J	0.00081 U	0.0006 U
Naphthalene	100	NE	12	mg/kg	0.58 J	0.0012 U	0.0012 U	0.0015 U	0.0019 U	0.0014 U
Phenanthrene	100	NE	1000	mg/kg	42	0.00076 U	0.00075 U	0.18 J	0.0013 U	0.0009 U
Pyrene	100	NE	1000	mg/kg	25	0.0022 U	0.0022 U	0.21 J	0.0035 U	0.0026 U
2-Methylnaphthalene	NE	NE	NE	mg/kg	8.2	0.0013 U	0.0013 U	0.0016 U	0.0021 U	0.0015 U
Total PAHs	NE	NE	NE	mg/kg	180	ND	ND	1.2	ND	ND
Other SVOCs										
Biphenyl	NE	NE	NE	mg/kg	2.8 J	0.0017 U	0.0016 U	0.002 U	0.0026 U	0.002 U
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	0.042 U	0.002 U	0.002 U	0.0025 U	0.0032 U	0.0024 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	0.065 U	0.0032 U	0.0032 U	0.0038 U	0.005 U	0.0037 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	0.025 U	0.0012 U	0.0012 U	0.0015 U	0.0019 U	0.0014 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	0.063 U	0.0031 U	0.0031 U	0.0037 U	0.0049 U	0.0037 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	0.081 UJ	0.004 UJ	0.0039 UJ	0.0048 UJ	0.0063 UJ	0.0047 UJ
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	0.063 U	0.0031 U	0.003 U	0.0037 UJ	0.0049 UJ	0.0036 UJ
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	0.03 U	0.0015 U	0.0015 U	0.0018 U	0.0023 U	0.0017 U
2-Chloronaphthalene	NE	NE	NE	mg/kg	0.031 U	0.0015 U	0.0015 U	0.0018 U	0.0024 U	0.0018 U
2-Chlorophenol	NE	NE	NE	mg/kg	0.028 U	0.0014 U	0.0014 U	0.0017 U	0.0022 U	0.0016 U
2-Methylphenol	100	NE	0.33	mg/kg	0.039 U	0.0019 U	0.0019 U	0.0023 U	0.003 U	0.0023 U
2-Nitroaniline	NE	NE	NE	mg/kg	0.064 U	0.0031 U	0.0031 U	0.0038 U	0.005 U	0.0037 U
2-Nitrophenol	NE	NE	NE	mg/kg	0.069 U	0.0033 U	0.0033 U	0.004 U	0.0053 U	0.004 U
3,3'-Dichlorobenzidine	NE	NE	NE	mg/kg	0.039 U	0.0019 U	0.0019 U	0.0023 U	0.003 U	0.0022 U
3-Nitroaniline	NE	NE	NE	mg/kg	0.073 U	0.0035 U	0.0035 U	0.0043 U	0.0056 U	0.0042 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	0.056 UJ	0.0028 UJ	0.0027 UJ	0.0033 UJ	0.0044 UJ	0.0033 UJ
4-Bromophenyl-phenylether	NE	NE	NE	mg/kg	0.022 U	0.0011 U	0.0011 U	0.0013 U	0.0017 U	0.0013 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.056 U	0.0027 U	0.0027 U	0.0033 U	0.0044 U	0.0032 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]									
Constituent	Protection of Public Health - Residential Zoning[a]	Protection of Ecological Resources	Protection of Groundwater	Units	B-116-09 13-14 11/10/2009	B-117-09 8-10 11/11/2009	B-117-09 10-12 11/11/2009	MW-108-09 16-18 11/17/2009	MW-108-09 22-24 11/17/2009	MW-109D-09 14-16 11/18/2009
4-Chloroaniline	NE	NE	NE	mg/kg	0.012 U	0.00055 U	0.00055 U	0.00067 U	0.00088 U	0.00066 U
4-Chlorophenyl-phenylether	NE	NE	NE	mg/kg	0.041 U	0.002 U	0.002 U	0.0024 U	0.0032 U	0.0024 U
4-Nitroaniline	NE	NE	NE	mg/kg	0.082 U	0.004 U	0.004 U	0.0048 U	0.0064 U	0.0047 U
4-Methylphenol	34	NE	0.33	mg/kg	0.02 U	0.00097 U	0.00097 U	0.0012 U	0.0016 U	0.0012 U
4-Nitrophenol	NE	NE	NE	mg/kg	0.048 UJ	0.0024 UJ	0.0024 UJ	0.0028 U	0.0037 U	0.0028 U
Acetophenone	NE	NE	NE	mg/kg	0.026 U	0.0013 U	0.0013 U	0.0016 U	0.002 U	0.0015 U
Atrazine	NE	NE	NE	mg/kg	0.029 UJ	0.0014 UJ	0.0014 UJ	0.0017 U	0.0022 U	0.0017 U
Benzaldehyde	NE	NE	NE	mg/kg	0.035 U	0.0017 U	0.0017 U	0.0021 U	0.0027 U	0.002 U
Bis(1-Chloroisopropyl) Ether	NE	NE	NE	mg/kg	0.013 U	0.0006 U	0.0006 U	0.00073 U	0.00095 U	0.00071 U
bis(2-Chloroethoxy) Methane	NE	NE	NE	mg/kg	0.022 U	0.0011 U	0.0011 U	0.0013 U	0.0017 U	0.0013 U
Bis(-2-chloroethyl)ether	NE	NE	NE	mg/kg	0.075 U	0.0037 U	0.0037 U	0.0044 U	0.0058 U	0.0043 U
Bis(2-ethylhexyl)phthalate	NE	NE	NE	mg/kg	0.015 U	0.00071 UJ	0.00071 U	0.066 J	0.0012 U	0.083 J
Caprolactam	NE	NE	NE	mg/kg	0.051 UJ	0.0025 UJ	0.0025 UJ	0.003 U	0.004 U	0.003 U
Carbazole	NE	NE	NE	mg/kg	0.0082 U	0.0004 U	0.0004 U	0.00048 U	0.00063 U	0.00047 U
Dibenzofuran	14	NE	210	mg/kg	1.1 J	0.002 U	0.002 U	0.0025 U	0.0032 U	0.0024 U
Benzyl Butyl Phthalate	NE	NE	NE	mg/kg	0.023 U	0.0011 U	0.0011 U	0.0013 U	0.0018 U	0.0013 U
Diethylphthalate	NE	NE	NE	mg/kg	0.028 U	0.0014 U	0.0014 U	0.0017 U	0.0022 U	0.0016 U
Dimethyl phthalate	NE	NE	NE	mg/kg	0.029 U	0.0014 U	0.0014 U	0.0017 U	0.0022 U	0.0017 U
Di-n-butylphthalate	NE	NE	NE	mg/kg	0.022 U	0.0011 U	0.0011 U	0.0013 U	0.0017 U	0.0013 U
Di-n-octyl phthalate	NE	NE	NE	mg/kg	0.03 U	0.0015 U	0.0015 U	0.0018 U	0.0023 U	0.0018 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	0.019 U	0.00088 U	0.00088 U	0.0011 U	0.0014 U	0.0011 U
Hexachlorobutadiene	NE	NE	NE	mg/kg	0.02 U	0.00097 U	0.00097 U	0.0012 U	0.0016 U	0.0012 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	0.041 U	0.002 U	0.002 U	0.0024 U	0.0032 U	0.0024 U
Hexachloroethane	NE	NE	NE	mg/kg	0.034 U	0.0017 U	0.0017 U	0.002 U	0.0027 U	0.002 U
Isophorone	NE	NE	NE	mg/kg	0.043 U	0.0021 U	0.0021 U	0.0026 U	0.0033 U	0.0025 U
Nitrobenzene	NE	NE	NE	mg/kg	0.026 U	0.0013 U	0.0013 U	0.0016 U	0.002 U	0.0015 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	0.029 U	0.0014 U	0.0014 U	0.0017 U	0.0022 U	0.0017 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	0.034 U	0.0017 U	0.0017 U	0.002 U	0.0026 U	0.002 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	0.028 UJ	0.0014 UJ	0.0014 UJ	0.0017 UJ	0.0022 UJ	0.0016 UJ
Phenol	100	30	0.33	mg/kg	0.031 U	0.0015 U	0.0015 U	0.0018 U	0.0024 U	0.0018 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Soil Cleanup Objectives [6 NYCRR Subpart 375-6] Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	B-116-09 13-14 11/10/2009	B-117-09 8-10 11/11/2009	B-117-09 10-12 11/11/2009	MW-108-09 16-18 11/17/2009	MW-108-09 22-24 11/17/2009	MW-109D-09 14-16 11/18/2009
Inorganic Constituents										
Total Cyanide	27	NE	40	mg/kg	1 U	0.91 U	0.91 U	1.3 U	1.4 U	0.91 U
Cyanide, Free	NE	NE	NE	mg/kg	0.0174 U	0.0168 U	0.0172 U	0.018 UJ	0.0247 UJ	0.0194 UJ

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the quantitation limit but above the method detection limit.
UJ - The analyte was not detected above the reported sample quantitation limit. However, based on data validation, the reported method detection limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.

NE - Not established.
ND - Not detected.
(a) - R-3 Zoning Classification (multi-family residential) per City of Rensselaer Planning and Building Department.

Boxed concentrations are above one or more of the following New York State Subpart 375 Soil Cleanup Objectives for: Residential Zoning, Protection of Ecological Resources, or Protection of Groundwater.

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Soil Cleanup Objectives [6 NYCRR Subpart 375-6] Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	MW-109D-09 26-28 11/18/2009	MW-110-09 12-14 11/16/2009	MW-110-09 20-22 11/16/2009	MW-111-09 10-11 11/13/2009	MW-111-09 DUP 10-11 11/13/2009	MW-111-09 16-18 11/13/2009
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	2.9	70	0.06	mg/kg	0.00014 UJ	0.00016 U	0.00013 U	0.00084 J	0.0031 J	0.00012 U
Toluene	100	36	0.7	mg/kg	0.0023 J	0.0018 J	0.00057 J	0.0031 J	0.0032 J	0.00095 J
Ethylbenzene	30	NE	1	mg/kg	0.0005 J	0.00047 U	0.00037 U	0.00082 J	0.00077 J	0.00034 U
o-Xylene	NE	NE	NE	mg/kg	0.00062 UJ	0.00072 U	0.00058 U	0.00077 J	0.00095 J	0.00052 U
m&p-Xylenes	NE	NE	NE	mg/kg	0.0013 J	0.00095 J	0.00065 U	0.0021 J	0.0019 J	0.00059 U
Xylenes, Total	100	0.26	1.6	mg/kg	0.0013	0.00095	ND	0.0029	0.0029	ND
Total BTEX	NE	NE	NE	mg/kg	0.0041	0.0028	0.00057	0.0076	0.0099	0.00095
Other VOCs										
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.00048 UJ	0.00056 U	0.00045 U	0.00057 U	0.00054 U	0.0004 U
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.00043 UJ	0.0005 U	0.0004 U	0.0005 U	0.00048 U	0.00036 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NE	NE	NE	mg/kg	0.00082 UJ	0.00096 U	0.00077 U	0.00097 U	0.00093 U	0.00069 U
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.00036 UJ	0.00042 U	0.00034 U	0.00042 U	0.0004 U	0.0003 U
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.00076 UJ	0.00089 U	0.00072 U	0.00091 U	0.00086 U	0.00064 U
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.00055 UJ	0.00064 U	0.00051 U	0.00065 U	0.00062 U	0.00046 U
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.0018 UJ	0.0021 U	0.0017 U	0.0021 U	0.002 U	0.0015 U
1,2-Dibromo-3-chloropropane	NE	NE	NE	mg/kg	0.0011 UJ	0.0013 U	0.0011 U	0.0014 U	0.0013 U	0.00093 U
1,2-Dibromoethane	NE	NE	NE	mg/kg	0.00032 UJ	0.00037 U	0.0003 U	0.00038 U	0.00036 U	0.00027 U
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.00052 UJ	0.00061 U	0.00049 U	0.00062 U	0.00059 U	0.00044 U
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.00047 UJ	0.00054 U	0.00044 U	0.00055 U	0.00053 U	0.00039 U
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.00056 UJ	0.00066 U	0.00053 U	0.00067 U	0.00063 U	0.00047 U
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.0007 UJ	0.00081 U	0.00065 U	0.00083 U	0.00079 U	0.00059 U
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.00071 UJ	0.00083 U	0.00067 U	0.00084 U	0.0008 U	0.0006 U
2-Butanone (MEK)	100	100	0.12	mg/kg	0.0076 J	0.039	0.0028 J	0.029	0.013 J	0.0016 U
2-Hexanone	NE	NE	NE	mg/kg	0.0015 UJ	0.0018 U	0.0015 U	0.0018 U	0.0017 U	0.0013 U
4-Methyl-2-pentanone	NE	NE	NE	mg/kg	0.0017 UJ	0.002 U	0.0016 U	0.002 U	0.0019 U	0.0014 U
Acetone	100	2.2	0.05	mg/kg	0.0012 UJ	**0.21**	0.0011 UJ	**0.16**	**0.058**	0.00094 U
Bromodichloromethane	NE	NE	NE	mg/kg	0.00057 UJ	0.00067 U	0.00054 U	0.00068 U	0.00065 U	0.00048 U
Bromoform	NE	NE	NE	mg/kg	0.00057 UJ	0.00067 U	0.00054 U	0.00068 U	0.00065 U	0.00048 U
Bromomethane	NE	NE	NE	mg/kg	0.00063 UJ	0.00074 U	0.00059 U	0.00075 U	0.00071 U	0.00053 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]									
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	MW-109D-09 26-28 11/18/2009	MW-110-09 12-14 11/16/2009	MW-110-09 20-22 11/16/2009	MW-111-09 10-11 11/13/2009	MW-111-09 DUP 10-11 11/13/2009	MW-111-09 16-18 11/13/2009
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.00034 UJ	0.0004 U	0.00032 U	0.00041 U	0.00039 U	0.00029 U
Carbon disulfide	NE	NE	NE	mg/kg	0.0027 J	0.0018 J	0.00055 J	0.0034 J	0.0046 J	0.00056 J
Chlorobenzene	100	40	1.1	mg/kg	0.0014 J	0.00045 U	0.00036 U	0.0012 J	0.00055 J	0.00043 J
Chloroethane	NE	NE	NE	mg/kg	0.00053 UJ	0.00062 U	0.0005 U	0.00063 U	0.0006 U	0.00045 U
Chloroform	10	12	0.37	mg/kg	0.0007 UJ	0.00081 U	0.00065 U	0.00083 U	0.00079 U	0.00059 U
Chloromethane	NE	NE	NE	mg/kg	0.0004 UJ	0.00047 U	0.00037 U	0.00047 U	0.00077 J	0.00034 U
Cyclohexane	NE	NE	NE	mg/kg	0.00038 UJ	0.00045 U	0.00036 U	0.00046 U	0.00043 U	0.00032 U
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.00063 UJ	0.00074 U	0.00059 U	0.00075 U	0.00071 U	0.00053 U
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00036 UJ	0.00042 U	0.00034 U	0.00042 U	0.0004 U	0.0003 U
Dibromochloromethane	NE	NE	NE	mg/kg	0.00028 UJ	0.00032 U	0.00026 U	0.00033 U	0.00031 U	0.00023 U
Dichlorodifluoromethane	NE	NE	NE	mg/kg	0.00086 UJ	0.001 U	0.00081 UJ	0.0011 U	0.00097 U	0.00072 U
Isopropylbenzene	NE	NE	NE	mg/kg	0.00028 UJ	0.00032 U	0.00026 U	0.0005 J	0.0013 J	0.00023 U
Methyl acetate	NE	NE	NE	mg/kg	0.0013 J	0.0013 J	0.0032 J	0.0029 J	0.0024 J	0.00073 U
Methylcyclohexane	NE	NE	NE	mg/kg	0.00033 UJ	0.00039 U	0.00031 U	0.00039 U	0.00037 U	0.00028 U
Methylene chloride	51	12	0.05	mg/kg	0.00067 UJ	0.00078 U	0.00063 U	0.0019 J	0.002 J	0.0012 J
tert-Butyl Methyl Ether	62	NE	0.93	mg/kg	0.00038 UJ	0.00045 U	0.00036 U	0.00046 U	0.00043 U	0.00032 U
Styrene	NE	NE	NE	mg/kg	0.00051 UJ	0.00059 U	0.00048 U	0.0006 U	0.0012 J	0.00043 U
Tetrachloroethene	5.5	2	1.3	mg/kg	0.00053 UJ	0.00062 U	0.0005 U	0.00063 U	0.0006 U	0.00045 U
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.00067 UJ	0.00078 U	0.00063 U	0.0008 U	0.00076 U	0.00056 U
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00034 UJ	0.0004 U	0.00032 U	0.00041 U	0.00039 U	0.00029 U
Trichloroethene	10	2	0.47	mg/kg	0.00041 UJ	0.00048 U	0.00039 U	0.00049 U	0.00047 U	0.00035 U
Trichlorofluoromethane	NE	NE	NE	mg/kg	0.00034 UJ	0.0004 U	0.00032 U	0.00041 U	0.00039 U	0.00029 U
Vinyl chloride	0.21	NE	0.02	mg/kg	0.0011 UJ	0.0012 U	0.00095 U	0.0012 U	0.0012 U	0.00085 U
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	100	20	98	mg/kg	0.0019 U	0.0022 U	0.0017 U	0.12 J	0.16 J	0.0016 U
Acenaphthylene	100	NE	107	mg/kg	0.0014 U	0.0016 U	0.0013 U	0.22 J	0.31 J	0.0012 U
Anthracene	100	NE	1000	mg/kg	0.0011 U	0.17 J	0.00099 U	0.56	1.2	0.00088 U
Benzo(a)anthracene	1	NE	1	mg/kg	0.0015 U	0.55	0.0014 U	**2.1**	**2.8**	0.033 J
Benzo(a)pyrene	1	2.6	22	mg/kg	0.0017 U	0.59	0.0016 U	**2**	**2.9**	0.0015 U
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	0.0033 U	0.37 J	0.0031 U	0.84	**1.2**	0.0028 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]									
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	MW-109D-09 26-28 11/18/2009	MW-110-09 12-14 11/16/2009	MW-110-09 20-22 11/16/2009	MW-111-09 10-11 11/13/2009	MW-111-09 DUP 10-11 11/13/2009	MW-111-09 16-18 11/13/2009
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	0.0011 U	0.38 J	0.00097 U	1.3	1.9	0.00087 U
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	0.0019 U	0.37 J	0.0017 U	**1**	**1.7**	0.0016 U
Chrysene	1	NE	1	mg/kg	0.00062 U	0.54	0.00058 U	**1.9**	**2.7**	0.031 J
Dibenzo(a,h)anthracene	0.33	NE	1000	mg/kg	0.00076 U	0.1 J	0.00072 U	**0.33 J**	**0.43 J**	0.00064 U
Fluoranthene	100	NE	1000	mg/kg	0.0028 U	1.1	0.0026 U	3	3.9	0.05 J
Fluorene	100	30	386	mg/kg	0.003 U	0.0035 U	0.0028 U	0.14 J	0.26 J	0.0025 U
Indeno(1,2,3-cd)pyrene	0.5	NE	8.2	mg/kg	0.00062 U	0.35 J	0.00058 U	**1**	**1.5**	0.00052 U
Naphthalene	100	NE	12	mg/kg	0.0015 U	0.039 J	0.0014 U	0.11 J	0.26 J	0.0012 U
Phenanthrene	100	NE	1000	mg/kg	0.00091 U	0.52 J	0.00086 U	1.4	3.3	0.053 J
Pyrene	100	NE	1000	mg/kg	0.0027 U	0.84	0.0025 U	4.1	5.8	0.057 J
2-Methylnaphthalene	NE	NE	NE	mg/kg	0.0016 U	0.0018 U	0.0015 U	0.0019 U	0.0035 U	0.0013 U
Total PAHs	NE	NE	NE	mg/kg	ND	5.9	ND	20	30	0.22
Other SVOCs										
Biphenyl	NE	NE	NE	mg/kg	0.002 U	0.0023 U	0.0019 U	0.0024 U	0.0044 U	0.0017 U
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	0.0025 U	0.0029 U	0.0023 U	0.0029 U	0.0055 U	0.0021 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	0.0038 U	0.0045 U	0.0036 U	0.0045 U	0.0086 U	0.0032 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	0.0015 U	0.0017 U	0.0014 U	0.0017 U	0.0033 U	0.0012 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	0.0037 U	0.0044 U	0.0035 U	0.0044 U	0.0084 U	0.0031 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	0.0048 UJ	0.0056 UJ	0.0045 UJ	0.0057 UJ	0.011 UJ	0.004 UJ
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	0.0037 UJ	0.0043 UJ	0.0035 UJ	0.0044 U	0.0083 U	0.0031 U
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	0.0018 U	0.0021 U	0.0017 U	0.0021 U	0.0039 U	0.0015 U
2-Chloronaphthalene	NE	NE	NE	mg/kg	0.0018 U	0.0021 U	0.0017 U	0.0022 U	0.0041 U	0.0016 U
2-Chlorophenol	NE	NE	NE	mg/kg	0.0017 U	0.002 U	0.0016 U	0.002 U	0.0037 U	0.0014 U
2-Methylphenol	100	NE	0.33	mg/kg	0.0023 U	0.0027 U	0.0022 U	0.028 J	0.0052 U	0.002 U
2-Nitroaniline	NE	NE	NE	mg/kg	0.0038 U	0.0044 U	0.0036 U	0.0045 U	0.0085 U	0.0032 U
2-Nitrophenol	NE	NE	NE	mg/kg	0.004 U	0.0047 U	0.0038 U	0.0048 U	0.0091 U	0.0034 U
3,3'-Dichlorobenzidine	NE	NE	NE	mg/kg	0.0023 U	0.0027 U	0.0021 U	0.0027 U	0.0051 U	0.0019 U
3-Nitroaniline	NE	NE	NE	mg/kg	0.0043 U	0.005 U	0.004 U	0.0051 U	0.0096 U	0.0036 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	0.0033 UJ	0.0039 UJ	0.0031 UJ	0.0039 UJ	0.0074 UJ	0.0028 UJ
4-Bromophenyl-phenylether	NE	NE	NE	mg/kg	0.0013 U	0.0015 U	0.0012 U	0.0015 U	0.0028 U	0.0011 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.0033 U	0.0039 U	0.0031 U	0.0039 U	0.0074 U	0.0028 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Soil Cleanup Objectives [6 NYCRR Subpart 375-6]									
Constituent	Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	MW-109D-09 26-28 11/18/2009	MW-110-09 12-14 11/16/2009	MW-110-09 20-22 11/16/2009	MW-111-09 10-11 11/13/2009	MW-111-09 DUP 10-11 11/13/2009	MW-111-09 16-18 11/13/2009
4-Chloroaniline	NE	NE	NE	mg/kg	0.00067 U	0.00078 U	0.00063 U	0.0008 U	0.0016 U	0.00056 U
4-Chlorophenyl-phenylether	NE	NE	NE	mg/kg	0.0024 U	0.0028 U	0.0023 U	0.0029 U	0.0054 U	0.0021 U
4-Nitroaniline	NE	NE	NE	mg/kg	0.0048 U	0.0056 U	0.0045 U	0.0057 U	0.011 U	0.0041 U
4-Methylphenol	34	NE	0.33	mg/kg	0.0012 U	0.0014 U	0.0011 U	0.0014 U	0.0027 U	0.00099 U
4-Nitrophenol	NE	NE	NE	mg/kg	0.0028 U	0.0033 UJ	0.0027 U	0.0034 U	0.0064 U	0.0024 UJ
Acetophenone	NE	NE	NE	mg/kg	0.0016 U	0.0018 U	0.0015 U	0.0018 U	0.0035 U	0.0013 U
Atrazine	NE	NE	NE	mg/kg	0.0017 U	0.002 UJ	0.0016 U	0.002 U	0.0038 U	0.0014 UJ
Benzaldehyde	NE	NE	NE	mg/kg	0.053 J	0.0024 U	0.0019 U	0.047 J	0.0046 U	0.0017 U
Bis(1-Chloroisopropyl) Ether	NE	NE	NE	mg/kg	0.00072 U	0.00085 U	0.00068 U	0.00086 U	0.0017 U	0.00061 U
bis(2-Chloroethoxy) Methane	NE	NE	NE	mg/kg	0.0013 U	0.0015 U	0.0012 U	0.0015 U	0.0029 U	0.0011 U
Bis(-2-chloroethyl)ether	NE	NE	NE	mg/kg	0.0044 U	0.0052 U	0.0042 U	0.0052 U	0.0099 U	0.0037 U
Bis(2-ethylhexyl)phthalate	NE	NE	NE	mg/kg	0.06 J	0.071 J	0.069 J	0.0011 U	0.002 U	0.00072 U
Caprolactam	NE	NE	NE	mg/kg	0.003 U	0.0035 UJ	0.0028 U	0.0036 U	0.0068 U	0.0025 UJ
Carbazole	NE	NE	NE	mg/kg	0.00048 U	0.00056 U	0.00045 U	0.00057 U	0.0011 U	0.0004 U
Dibenzofuran	14	NE	210	mg/kg	0.0025 U	0.0029 U	0.0023 U	0.0029 U	0.0055 U	0.0021 U
Benzyl Butyl Phthalate	NE	NE	NE	mg/kg	0.0013 U	0.0016 U	0.0013 U	0.0016 U	0.003 U	0.0011 U
Diethylphthalate	NE	NE	NE	mg/kg	0.0017 U	0.0019 U	0.0016 U	0.002 U	0.0037 U	0.0014 U
Dimethyl phthalate	NE	NE	NE	mg/kg	0.0017 U	0.002 U	0.0016 U	0.002 U	0.0038 U	0.0014 U
Di-n-butylphthalate	NE	NE	NE	mg/kg	0.0013 U	0.0015 U	0.0012 U	0.0015 U	0.0029 U	0.12 J
Di-n-octyl phthalate	NE	NE	NE	mg/kg	0.0018 U	0.0021 U	0.0017 U	0.0021 U	0.004 U	0.0015 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.0024 U	0.00089 U
Hexachlorobutadiene	NE	NE	NE	mg/kg	0.0012 U	0.0014 U	0.0011 U	0.0014 U	0.0027 U	0.00099 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	0.0024 U	0.0028 U	0.0023 U	0.0028 U	0.0054 U	0.002 U
Hexachloroethane	NE	NE	NE	mg/kg	0.002 U	0.0024 U	0.0019 U	0.0024 U	0.0045 U	0.0017 U
Isophorone	NE	NE	NE	mg/kg	0.0025 U	0.003 U	0.0024 U	0.003 U	0.0057 U	0.0021 U
Nitrobenzene	NE	NE	NE	mg/kg	0.0016 U	0.0018 U	0.0015 U	0.0018 U	0.0035 U	0.0013 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	0.0017 U	0.002 U	0.0016 U	0.002 U	0.0038 U	0.0014 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	0.002 U	0.0024 U	0.0019 U	0.0024 U	0.0045 U	0.0017 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	0.0017 UJ	0.0019 UJ	0.0016 UJ	0.002 UJ	0.0037 UJ	0.0014 UJ
Phenol	100	30	0.33	mg/kg	0.0018 U	0.0021 U	0.0017 U	0.0022 U	0.0041 U	0.0015 U

TABLE 5
SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Soil Cleanup Objectives [6 NYCRR Subpart 375-6] Protection of Public Health - Residential Zoning[(a)]	Protection of Ecological Resources	Protection of Groundwater	Units	MW-109D-09 26-28 11/18/2009	MW-110-09 12-14 11/16/2009	MW-110-09 20-22 11/16/2009	MW-111-09 10-11 11/13/2009	MW-111-09 DUP 10-11 11/13/2009	MW-111-09 16-18 11/13/2009
Inorganic Constituents										
Total Cyanide	27	NE	40	mg/kg	1.3 U	1.3 U	1 U	1.3 U	5.7	1 U
Cyanide, Free	NE	NE	NE	mg/kg	0.0182 UJ	0.0213 UJ	0.0186 UJ	0.0306 J	0.0231 U	0.0171 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the quantitation limit but above the method detection limit.
UJ - The analyte was not detected above the reported sample quantitation limit. However, based on data validation, the reported method detection limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.

NE - Not established.
ND - Not detected.
(a) - R-3 Zoning Classification (multi-family residential) per City of Rensselaer Planning and Building Department.

Boxed concentrations are above one or more of the following New York State Subpart 375 Soil Cleanup Objectives for: Residential Zoning, Protection of Ecological Resources, or Protection of Groundwater.

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Constituent	Class GA Groundwater Criteria TOGS 1.1.1 Guidance	NYS Part 703[1] Standard	Units	MW-101-05 12/9/2009	MW-102-05 12/10/2009	MW-103-05 12/8/2009	MW-104-08 12/8/2009	MW-105-08 12/8/2009	MW-107-08 12/9/2009	MW-108-09 12/8/2009
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	--	1	µg/L	0.2 U	**540**	**4.8 J**	0.2 U	0.4 J	**9.3 J**	0.2 U
Toluene	--	5	µg/L	0.27 U	**39**	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Ethylbenzene	--	5	µg/L	0.21 U	**660**	**12**	0.21 U	1.2 J	**40**	0.21 U
o-Xylene	--	5	µg/L	0.17 U	**230**	4.8 J	0.17 U	1.2 J	**12**	0.17 U
m&p-Xylenes	--	5	µg/L	0.29 U	**340**	0.59 J	0.29 U	0.29 U	**14**	0.29 U
Total BTEX	--	--	µg/L	ND	1809	22	ND	2.8	75	ND
Other VOCs										
1,1,1-Trichloroethane	--	5	µg/L	0.28 U	1.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,2,2-Tetrachloroethane	--	5	µg/L	0.18 U	0.9 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-Trichloro-1,2,2-trifluoroethane	--	5	µg/L	0.42 U	2.1 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,1,2-Trichloroethane	--	1	µg/L	0.25 U	1.3 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1-Dichloroethane	--	5	µg/L	0.17 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1-Dichloroethene	--	5	µg/L	0.34 U	0.68 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,2,4-Trichlorobenzene	--	5	µg/L	0.45 U	2.3 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,2-Dibromo-3-chloropropane	--	0.04	µg/L	0.36 U	0.72 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2-Dibromoethane	--	0.0006	µg/L	0.19 U	0.95 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichlorobenzene	--	3	µg/L	0.25 U	0.5 U	0.72 J	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichloroethane	--	0.6	µg/L	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloropropane	--	1	µg/L	0.67 U	3.4 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,3-Dichlorobenzene	--	3	µg/L	0.39 U	0.78 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,4-Dichlorobenzene	--	3	µg/L	0.42 U	0.84 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2-Butanone (MEK)	50	--	µg/L	0.54 U	2.7 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
2-Hexanone	50	--	µg/L	0.59 U	3 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
4-Methyl-2-pentanone	--	--	µg/L	0.6 U	3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Acetone	50	--	µg/L	1.3 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U	1.9 J
Bromodichloromethane	50	--	µg/L	0.16 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Bromoform	50	--	µg/L	0.42 U	2.1 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Bromomethane	--	5	µg/L	0.53 U	1.1 U	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-101-05	MW-102-05	MW-103-05	MW-104-08	MW-105-08	MW-107-08	MW-108-09
	TOGS 1.1.1	NYS Part 703[1]		12/9/2009	12/10/2009	12/8/2009	12/8/2009	12/8/2009	12/9/2009	12/8/2009
Constituent	Guidance	Standard	Units							
Carbon tetrachloride	--	5	µg/L	0.22 U	0.44 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon disulfide	--	60	µg/L	0.28 U	0.56 U	0.28 U	0.28 U	0.28 U	0.28 U	0.88 J
Chlorobenzene	--	5	µg/L	0.24 U	0.48 U	1.3 J	0.24 U	0.24 U	0.24 U	0.24 U
Chloroethane	--	5	µg/L	0.36 U	0.72 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	--	7	µg/L	0.16 U	0.8 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloromethane	--	5	µg/L	0.39 U	0.78 U	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Cyclohexane	--	--	µg/L	0.22 U	76	0.22 U	0.22 U	0.22 U	1.4 J	0.22 U
cis-1,2-Dichloroethene	--	5	µg/L	0.21 U	0.42 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	--	0.4	µg/L	0.16 U	0.8 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Dibromochloromethane	50	50	µg/L	0.17 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	--	5	µg/L	0.59 U	3 U	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Isopropylbenzene	--	5	µg/L	0.23 U	**56**	4.7 J	0.23 U	1.7 J	4.6 J	0.23 U
Methyl acetate	--	--	µg/L	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Methylcyclohexane	--	--	µg/L	0.33 U	47	0.33 U	0.33 U	0.33 U	0.46 J	0.33 U
Methylene chloride	--	5	µg/L	0.22 U	1.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
tert-Butyl Methyl Ether	10	--	µg/L	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	--	5	µg/L	0.18 U	2.2	0.18 U	0.18 U	0.18 U	0.77 J	0.18 U
Tetrachloroethene	--	5	µg/L	0.22 U	1.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
trans-1,2-Dichloroethene	--	5	µg/L	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	--	0.4	µg/L	0.25 U	1.3 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichloroethene	--	5	µg/L	0.28 U	1.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Trichlorofluoromethane	--	5	µg/L	0.17 U	0.86 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Vinyl chloride	--	2	µg/L	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	20	--	µg/L	1.4 U	**89 J**	**40**	4.4 J	**38**	**100**	1.4 U
Acenaphthylene	--	--	µg/L	0.99 U	50 U	14	1 J	8.6 J	14 J	0.99 U
Anthracene	50	--	µg/L	0.77 U	39 U	2.6 J	0.77 U	6.4 J	9 J	0.77 U
Benzo(a)anthracene	0.002	--	µg/L	1.1 U	54 U	1.1 U	1.1 U	1.1 U	3.3 U	1.1 U
Benzo(a)pyrene	--	0	µg/L	1.3 U	62 U	1.3 U	1.3 U	1.3 U	3.8 U	1.3 U
Benzo(b)fluoranthene	0.002	--	µg/L	2.4 U	120 U	2.4 U	2.4 U	2.4 U	7.2 U	2.4 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-101-05	MW-102-05	MW-103-05	MW-104-08	MW-105-08	MW-107-08	MW-108-09
	TOGS 1.1.1	NYS Part 703[1]		12/9/2009	12/10/2009	12/8/2009	12/8/2009	12/8/2009	12/9/2009	12/8/2009
Constituent	Guidance	Standard	Units							
Benzo(g,h,i)perylene	--	--	µg/L	0.76 U	38 U	0.76 U	0.76 U	0.76 U	2.3 U	0.76 U
Benzo(k)fluoranthene	0.002	--	µg/L	1.4 U	67 U	1.4 U	1.4 U	1.4 U	4 U	1.4 U
Chrysene	0.002	--	µg/L	0.45 U	23 U	0.45 U	0.45 U	0.45 U	1.4 U	0.45 U
Dibenzo(a,h)anthracene	--	--	µg/L	0.56 U	29 U	0.56 U	0.56 U	0.56 U	1.7 U	0.56 U
Fluoranthene	50	--	µg/L	2.1 U	110 U	2.1 U	2.1 U	4.1 J	7 J	2.1 U
Fluorene	50	--	µg/L	2.2 U	110 U	2.2 U	2.2 U	2.2 U	27 J	2.2 U
Indeno(1,2,3-cd)pyrene	0.002	--	µg/L	0.45 U	23 U	0.45 U	0.45 U	0.45 U	1.4 U	0.45 U
Naphthalene	10	--	µg/L	1.1 U	**2400**	5.7 J	1.1 U	1.3 J	**190**	1.1 U
Phenanthrene	50	--	µg/L	0.67 U	**54 J**	11	0.67 U	28	**50**	0.67 U
Pyrene	50	--	µg/L	2 U	98 U	2.2 J	2 U	5.5 J	7.8 J	2 U
2-Methylnaphthalene	--	4.7	µg/L	1.2 U	**320 J**	1.2 U	1.2 U	1.2 U	**23 J**	1.2 U
Total PAHs	--	--	µg/L	ND	2863	76	5.4	92	428	ND
Other SVOCs										
Biphenyl	--	5	µg/L	1.5 U	72 U	**8.8 J**	1.5 U	**6.8 J**	**30**	1.5 U
2,4,5-Trichlorophenol	--	1	µg/L	1.8 U	89 U	1.8 U	1.8 U	1.8 U	5.4 U	1.8 U
2,4,6-Trichlorophenol	--	1	µg/L	2.8 U	140 U	2.8 U	2.8 U	2.8 U	8.4 U	2.8 U
2,4-Dichlorophenol	--	1	µg/L	1.1 U	53 U	1.1 U	1.1 U	1.1 U	3.2 U	1.1 U
2,4-Dimethylphenol	--	50	µg/L	2.8 U	140 U	2.8 U	2.8 U	2.8 U	8.2 U	2.8 U
2,4-Dinitrophenol	--	10	µg/L	3.5 UJ	180 UJ	3.5 UJ	3.5 UJ	3.5 UJ	11 UJ	3.5 UJ
2,4-Dinitrotoluene	--	5	µg/L	2.7 U	140 U	2.7 U	2.7 U	2.7 U	8.1 U	2.7 U
2,6-Dinitrotoluene	--	5	µg/L	1.3 U	64 U	1.3 U	1.3 U	1.3 U	3.9 U	1.3 U
2-Chloronaphthalene	10	--	µg/L	1.4 U	66 U	1.4 U	1.4 U	1.4 U	4 U	1.4 U
2-Chlorophenol	--	1	µg/L	1.2 U	60 U	1.2 U	1.2 U	1.2 U	3.6 U	1.2 U
2-Methylphenol	--	1	µg/L	1.7 U	84 U	1.7 U	1.7 U	1.7 U	5.1 U	1.7 U
2-Nitroaniline	--	5	µg/L	2.8 U	140 U	2.8 U	2.8 U	2.8 U	8.3 U	2.8 U
2-Nitrophenol	--	1	µg/L	3 U	150 U	3 U	3 U	3 U	8.9 U	3 U
3,3'-Dichlorobenzidine	--	5	µg/L	1.7 U	82 U	1.7 U	1.7 U	1.7 U	5 U	1.7 U
3-Nitroaniline	--	5	µg/L	3.2 U	160 U	3.2 U	3.2 U	3.2 U	9.4 U	3.2 U
4,6-Dinitro-2-methylphenol	--	1	µg/L	2.5 UJ	130 UJ	2.5 UJ	2.5 UJ	2.5 UJ	7.3 UJ	2.5 UJ
4-Bromophenyl-phenylether	--	5	µg/L	0.91 U	46 U	0.91 U	0.91 U	0.91 U	2.8 U	0.91 U
4-Chloro-3-methylphenol	--	1	µg/L	2.4 U	120 U	2.4 U	2.4 U	2.4 U	7.2 U	2.4 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-101-05	MW-102-05	MW-103-05	MW-104-08	MW-105-08	MW-107-08	MW-108-09
	TOGS 1.1.1	NYS Part 703[1]		12/9/2009	12/10/2009	12/8/2009	12/8/2009	12/8/2009	12/9/2009	12/8/2009
Constituent	Guidance	Standard	Units							
4-Chloroaniline	--	5	µg/L	0.49 U	25 U	0.49 U	0.49 U	0.49 U	1.5 U	0.49 U
4-Chlorophenyl-phenylether	--	5	µg/L	1.8 U	88 U	1.8 U	1.8 U	1.8 U	5.3 U	1.8 U
4-Nitroaniline	--	5	µg/L	3.6 U	180 U	3.6 U	3.6 U	3.6 U	11 U	3.6 U
4-Methylphenol	--	--	µg/L	0.86 U	43 U	0.86 U	0.86 U	0.86 U	2.6 U	0.86 U
4-Nitrophenol	--	1	µg/L	2.1 UJ	110 U	2.1 U	2.1 U	2.1 U	6.2 U	2.1 U
Acetophenone	--	--	µg/L	1.2 U	56 U	1.2 U	1.2 U	1.2 U	3.4 U	1.2 U
Atrazine	--	7.5	µg/L	1.3 U	61 UJ	1.3 U	1.3 U	1.3 U	3.7 UJ	1.3 U
Benzaldehyde	--	--	µg/L	1.5 U	75 U	1.5 U	1.5 U	1.5 U	4.5 U	1.5 U
Bis(1-Chloroisopropyl) Ether	--	5	µg/L	0.53 U	27 U	0.53 U	0.53 U	0.53 U	1.6 U	0.53 U
bis(2-Chloroethoxy) Methane	--	5	µg/L	0.93 U	47 U	0.93 U	0.93 U	0.93 U	2.8 U	0.93 U
Bis(-2-chloroethyl)ether	--	1	µg/L	3.3 U	170 U	3.3 U	3.3 U	3.3 U	9.7 U	3.3 U
Bis(2-ethylhexyl)phthalate	--	5	µg/L	0.63 U	32 U	1.2 J	1.2 J	2.7 J	1.9 U	1.4 J
Caprolactam	--	--	µg/L	2.2 U	110 U	2.2 U	2.2 U	2.2 U	6.6 U	8.2 J
Carbazole	--	--	µg/L	0.36 U	18 U	6.7 J	0.36 U	1.6 J	1.1 U	0.36 U
Dibenzofuran	--	--	µg/L	1.8 U	89 U	5.5 J	1.8 U	2.3 J	7.3 J	1.8 U
Benzyl Butyl Phthalate	--	--	µg/L	0.96 U	48 U	0.96 U	0.96 U	0.96 U	2.9 U	0.96 U
Diethylphthalate	50	--	µg/L	1.2 U	60 U	1.2 U	1.2 U	1.2 U	3.6 U	1.2 U
Dimethyl phthalate	50	--	µg/L	1.3 U	61 U	1.3 U	1.3 U	1.3 U	3.7 U	1.3 U
Di-n-butylphthalate	--	50	µg/L	0.93 U	47 U	0.93 U	0.93 U	0.93 U	2.8 U	0.93 U
Di-n-octyl phthalate	50	--	µg/L	1.3 U	64 U	1.3 U	1.3 U	1.3 U	3.9 U	1.3 U
Hexachlorobenzene	--	0.04	µg/L	0.78 U	39 U	0.78 U	0.78 U	0.78 U	2.4 U	0.78 U
Hexachlorobutadiene	--	0.5	µg/L	0.86 U	43 U	0.86 U	0.86 U	0.86 U	2.6 U	0.86 U
Hexachlorocyclopentadiene	--	5	µg/L	1.8 U	87 U	1.8 U	1.8 U	1.8 U	5.2 U	1.8 U
Hexachloroethane	--	5	µg/L	1.5 U	73 U	1.5 U	1.5 U	1.5 U	4.4 U	1.5 U
Isophorone	--	50	µg/L	1.9 U	92 U	1.9 U	1.9 U	1.9 U	5.6 U	1.9 U
Nitrobenzene	--	0.4	µg/L	1.2 U	56 U	1.2 U	1.2 U	1.2 U	3.4 U	1.2 U
N-Nitroso-di-n-propylamine	--	5	µg/L	1.3 U	61 U	1.3 U	1.3 U	1.3 U	3.7 U	1.3 U
N-Nitrosodiphenylamine	50	--	µg/L	1.5 U	73 U	1.5 U	1.5 U	1.5 U	4.4 U	1.5 U
Pentachlorophenol	--	1	µg/L	1.2 UJ	60 UJ	1.2 UJ	1.2 UJ	1.2 UJ	3.6 UJ	1.2 UJ
Phenol	--	1	µg/L	1.4 U	66 U	1.4 U	1.4 U	1.4 U	4 U	1.4 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-101-05	MW-102-05	MW-103-05	MW-104-08	MW-105-08	MW-107-08	MW-108-09
	TOGS 1.1.1	NYS Part 703[(1)]		12/9/2009	12/10/2009	12/8/2009	12/8/2009	12/8/2009	12/9/2009	12/8/2009
Constituent	**Guidance**	**Standard**	**Units**							
Inorganic Constituents										
Total Cyanide	--	200	µg/L	**260**	82	113	5 U	124	27	5 U
Cyanide, Free	--	--	µg/L	8 J	4 J	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the quantitation limit but above the method detection limit.
UJ - The analyte was not detected above the reported sample quantitation limit. However, based on data validation, the reported method detection limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.

-- Standard and/or guidance value not established.
ND - Not detected
Boxed concentrations are above New York State Class GA Groundwater Standards or Guidance values.

(1) - Notes applicable to NYS Part 703 Standards:
(a) - Any detected concentration for Benzo(a)pyrene is considered above the Part 703 Standard.
(b) - The standard for the sum of phenolic compounds is 1 µg/L

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-108-09 DUP	MW-109S-09	MW-109D-09	MW-110-09	MW-111-09
	TOGS 1.1.1	NYS Part 703[1]		12/8/2009	12/7/2009	12/7/2009	12/9/2009	12/9/2009
Constituent	Guidance	Standard	Units					
Volatile Organic Compounds (VOCs)								
BTEX								
Benzene	--	1	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	--	5	µg/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Ethylbenzene	--	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
o-Xylene	--	5	µg/L	0.17 U	0.3 J	0.17 U	0.17 U	0.17 U
m&p-Xylenes	--	5	µg/L	0.29 U	0.71 J	0.29 U	0.29 U	0.29 U
Total BTEX	--	--	µg/L	ND	1.0	ND	ND	ND
Other VOCs								
1,1,1-Trichloroethane	--	5	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,1,2,2-Tetrachloroethane	--	5	µg/L	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-Trichloro-1,2,2-trifluoroethane	--	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,1,2-Trichloroethane	--	1	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1-Dichloroethane	--	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
1,1-Dichloroethene	--	5	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,2,4-Trichlorobenzene	--	5	µg/L	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,2-Dibromo-3-chloropropane	--	0.04	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,2-Dibromoethane	--	0.0006	µg/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,2-Dichlorobenzene	--	3	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,2-Dichloroethane	--	0.6	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,2-Dichloropropane	--	1	µg/L	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,3-Dichlorobenzene	--	3	µg/L	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
1,4-Dichlorobenzene	--	3	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
2-Butanone (MEK)	50	--	µg/L	0.54 U	1.7 J	0.54 U	0.54 U	0.54 U
2-Hexanone	50	--	µg/L	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
4-Methyl-2-pentanone	--	--	µg/L	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Acetone	50	--	µg/L	2.4 J	9.6 J	1.3 U	3.4 J	1.3 U
Bromodichloromethane	50	--	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Bromoform	50	--	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Bromomethane	--	5	µg/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-108-09 DUP	MW-109S-09	MW-109D-09	MW-110-09	MW-111-09
	TOGS 1.1.1	NYS Part 703[1]		12/8/2009	12/7/2009	12/7/2009	12/9/2009	12/9/2009
Constituent	Guidance	Standard	Units					
Carbon tetrachloride	--	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Carbon disulfide	--	60	µg/L	0.93 J	5.6 J	0.28 U	0.28 U	0.28 U
Chlorobenzene	--	5	µg/L	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Chloroethane	--	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroform	--	7	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloromethane	--	5	µg/L	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Cyclohexane	--	--	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
cis-1,2-Dichloroethene	--	5	µg/L	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,3-Dichloropropene	--	0.4	µg/L	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Dibromochloromethane	50	50	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Dichlorodifluoromethane	--	5	µg/L	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Isopropylbenzene	--	5	µg/L	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Methyl acetate	--	--	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Methylcyclohexane	--	--	µg/L	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methylene chloride	--	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
tert-Butyl Methyl Ether	10	--	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	--	5	µg/L	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Tetrachloroethene	--	5	µg/L	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
trans-1,2-Dichloroethene	--	5	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	--	0.4	µg/L	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Trichloroethene	--	5	µg/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Trichlorofluoromethane	--	5	µg/L	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Vinyl chloride	--	2	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Semi-volatile Organic Compounds (SVOCs)								
Polycyclic Aromatic Hydrocarbons (PAHs)								
Acenaphthene	20	--	µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Acenaphthylene	--	--	µg/L	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
Anthracene	50	--	µg/L	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
Benzo(a)anthracene	0.002	--	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Benzo(a)pyrene	--	0	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Benzo(b)fluoranthene	0.002	--	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-108-09 DUP	MW-109S-09	MW-109D-09	MW-110-09	MW-111-09
	TOGS 1.1.1	NYS Part 703[(1)]		12/8/2009	12/7/2009	12/7/2009	12/9/2009	12/9/2009
Constituent	Guidance	Standard	Units					
Benzo(g,h,i)perylene	--	--	µg/L	0.76 U	0.76 U	0.76 U	0.76 U	0.76 U
Benzo(k)fluoranthene	0.002	--	µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Chrysene	0.002	--	µg/L	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Dibenzo(a,h)anthracene	--	--	µg/L	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
Fluoranthene	50	--	µg/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Fluorene	50	--	µg/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Indeno(1,2,3-cd)pyrene	0.002	--	µg/L	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Naphthalene	10	--	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Phenanthrene	50	--	µg/L	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Pyrene	50	--	µg/L	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene	--	4.7	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Total PAHs	--	--	µg/L	ND	ND	ND	ND	ND
Other SVOCs								
Biphenyl	--	5	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
2,4,5-Trichlorophenol	--	1	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
2,4,6-Trichlorophenol	--	1	µg/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2,4-Dichlorophenol	--	1	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2,4-Dimethylphenol	--	50	µg/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2,4-Dinitrophenol	--	10	µg/L	3.5 UJ	3.5 UJ	3.5 UJ	3.5 UJ	3.5 UJ
2,4-Dinitrotoluene	--	5	µg/L	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
2,6-Dinitrotoluene	--	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Chloronaphthalene	10	--	µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
2-Chlorophenol	--	1	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2-Methylphenol	--	1	µg/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
2-Nitroaniline	--	5	µg/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
2-Nitrophenol	--	1	µg/L	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	--	5	µg/L	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
3-Nitroaniline	--	5	µg/L	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
4,6-Dinitro-2-methylphenol	--	1	µg/L	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ	2.5 UJ
4-Bromophenyl-phenylether	--	5	µg/L	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
4-Chloro-3-methylphenol	--	1	µg/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-108-09 DUP	MW-109S-09	MW-109D-09	MW-110-09	MW-111-09
	TOGS 1.1.1	NYS Part 703[1]		12/8/2009	12/7/2009	12/7/2009	12/9/2009	12/9/2009
Constituent	Guidance	Standard	Units					
4-Chloroaniline	--	5	µg/L	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
4-Chlorophenyl-phenylether	--	5	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
4-Nitroaniline	--	5	µg/L	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
4-Methylphenol	--	--	µg/L	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
4-Nitrophenol	--	1	µg/L	2.1 U	2.1 U	2.1 U	2.1 UJ	2.1 UJ
Acetophenone	--	--	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Atrazine	--	7.5	µg/L	1.3 U	1.3 U	1.3 U	1.3 UJ	1.3 UJ
Benzaldehyde	--	--	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Bis(1-Chloroisopropyl) Ether	--	5	µg/L	0.53 U	0.53 U	0.53 U	0.53 U	0.53 U
bis(2-Chloroethoxy) Methane	--	5	µg/L	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U
Bis(-2-chloroethyl)ether	--	1	µg/L	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Bis(2-ethylhexyl)phthalate	--	5	µg/L	2.2 J	1.1 J	0.63 U	0.63 U	1.4 J
Caprolactam	--	--	µg/L	14	2.2 U	2.2 U	2.2 U	2.2 U
Carbazole	--	--	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Dibenzofuran	--	--	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Benzyl Butyl Phthalate	--	--	µg/L	1.3 J	0.96 U	0.96 U	0.96 U	0.96 U
Diethylphthalate	50	--	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Dimethyl phthalate	50	--	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Di-n-butylphthalate	--	50	µg/L	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U
Di-n-octyl phthalate	50	--	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Hexachlorobenzene	--	0.04	µg/L	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Hexachlorobutadiene	--	0.5	µg/L	0.86 U	0.86 U	0.86 U	0.86 U	0.86 U
Hexachlorocyclopentadiene	--	5	µg/L	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Hexachloroethane	--	5	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Isophorone	--	50	µg/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	--	0.4	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
N-Nitroso-di-n-propylamine	--	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
N-Nitrosodiphenylamine	50	--	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Pentachlorophenol	--	1	µg/L	1.2 UJ	1.2 UJ	1.2 UJ	1.2 UJ	1.2 UJ
Phenol	--	1	µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U

TABLE 6
GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

	Class GA Groundwater Criteria			MW-108-09 DUP	MW-109S-09	MW-109D-09	MW-110-09	MW-111-09
	TOGS 1.1.1	NYS Part 703[(1)]		12/8/2009	12/7/2009	12/7/2009	12/9/2009	12/9/2009
Constituent	**Guidance**	**Standard**	**Units**					
Inorganic Constituents								
Total Cyanide	--	200	µg/L	5 U	5 U	5 U	5 U	5 U
Cyanide, Free	--	--	µg/L	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the reporting limit for the analyzed constituent.
J - Estimated concentration. The result is below the quantitation limit but above the method detection limit.
UJ - The analyte was not detected above the reported sample quantitation limit. However, based on data validation, the reported method detection limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.

-- Standard and/or guidance value not established.
ND - Not detected
Boxed concentrations are above New York State Class GA Groundwater Standards or Guidance values.

(1) - Notes applicable to NYS Part 703 Standards:
(a) - Any detected concentration for Benzo(a)pyrene is considered above the Part 703 Standard.
(b) - The standard for the sum of phenolic compounds is 1 µg/L

TABLE 7
SOIL VAPOR AND OUTDOOR AIR RESULTS
RENSSELAER NON-OWNED MGP SITE
RENSSELAER, NEW YORK

Constituent	NYSDOH Typical Indoor Air Conc. ($\mu g/m^3$) Residential [a]	USEPA Target Indoor Air Conc. ($\mu g/m^3$) Residential [b]	SV-1-09 12/22/2009 ($\mu g/m^3$)	SV-1-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-2-09 12/22/2009 ($\mu g/m^3$)	SV-2-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	DUP122209 12/22/2009 ($\mu g/m^3$)	DUP122209 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-3-09 12/22/2009 ($\mu g/m^3$)	SV-3-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-4-09 12/22/2009 ($\mu g/m^3$)	SV-4-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-5-09 12/22/2009 ($\mu g/m^3$)	SV-5-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	OA-1-09 12/22/2009 ($\mu g/m^3$)	OA-2-09 12/22/2009 ($\mu g/m^3$)	OA-3-09 12/22/2009 ($\mu g/m^3$)	OA-4-09 12/22/2009 ($\mu g/m^3$)
Benzene	13	3.1	0.43	0.043	0.11 J	0.011	0.078 J	0.0078	0.091 J	0.0091	0.27	0.027	0.15 J	0.015	0.74	1.2	0.77	0.68
Ethylbenzene	6.4	9.7	0.24 J	0.024	0.12 U	ND	0.18 J	0.018	0.12 U	ND	0.12 U	ND	0.19 J	0.019	0.15 J	0.32 J	0.14 J	0.12 U
m&p-Xylenes	11	NE	0.45	0.045	0.22 U	ND	0.23 J	0.023	0.22 U	ND	0.22 U	ND	0.54	0.054	0.42	0.93	0.41	0.22 U
o-Xylene	7.1	NE	0.36	0.036	0.1 U	ND	0.16 J	0.016	0.1 U	ND	0.1 U	ND	0.15 J	0.015	0.15 J	0.32 J	0.15 J	0.1 U
Toluene	57	NE	0.97	0.097	0.079 U	ND	0.19 J	0.019	0.44	0.044	1.7	0.17	0.22 J	0.022	1.1	2.2	1	0.99
Naphthalene	NE	0.72	0.19 U	ND	0.19 U	ND	0.19 U	ND	0.19 U	ND	0.19 U	ND	0.19 U	ND	0.19 U	0.19 U	0.19 U	0.19 U
1-Methylnaphthalene	NE	NE	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	5.8 U	5.8 U	5.8 U
2-Methylnaphthalene	NE	NE	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	ND	5.8 U	5.8 U	5.8 U	5.8 U
Hexachlorobutadiene	0.5	1.1	0.33 UJ	ND	0.33 UJ	ND	0.33 UJ	ND	0.33 UJ	ND	0.33 UJ	ND	0.33 UJ	ND	0.33 UJ	0.33 UJ	0.33 UJ	0.33 UJ
1,1,1-Trichloroethane	2.5	NE	0.065 U	ND	0.065 U	ND	0.065 U	ND	0.065 U	ND	0.065 U	ND	0.065 U	ND	0.065 U	0.065 U	0.065 U	0.065 U
1,1,2,2-Tetrachloroethane	0.4	0.42	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	0.16 U	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	NE	0.56 J	0.056	0.25 J	0.025	0.24 J	0.024	0.43 J	0.043	0.47 J	0.047	0.43 J	0.043	0.56 J	0.58 J	0.59 J	0.55 J
1,1,2-Trichloroethane	0.4	1.5	0.11 U	ND	0.11 U	ND	0.11 U	ND	0.11 U	ND	0.11 U	ND	0.11 U	ND	0.11 U	0.11 U	0.11 U	0.11 U
1,1-Dichloroethane	0.4	15	0.04 U	ND	0.04 U	ND	0.04 U	ND	0.04 U	ND	0.04 U	ND	0.04 U	ND	0.04 U	0.04 U	0.04 U	0.04 U
1,1-Dichloroethene	0.4	NE	0.052 U	ND	0.052 U	ND	0.052 U	ND	0.052 U	ND	0.052 U	ND	0.052 U	ND	0.052 U	0.052 U	0.052 U	0.052 U
1,2,3,4-Tetramethylbenzene	NE	NE	0.49 U	ND	0.49 U	ND	0.49 U	ND	0.49 U	ND	0.49 U	ND	0.49 U	ND	0.49 U	0.49 U	0.49 U	0.49 U
1,2,3,5-Tetramethylbenzene	NE	NE	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	0.44 U	0.44 U	0.44 U
1,2,3-Trimethylbenzene	0.5	NE	0.43	0.043	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	0.39 U	0.39 U	0.39 U
1,2,4,5-Tetramethylbenzene	NE	NE	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	ND	0.44 U	0.44 U	0.44 U	0.44 U
1,2,4-Trichlorobenzene	0.5	NE	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	0.29 UJ	0.29 U	0.29 U
1,2,4-Trimethylbenzene	0.5	NE	0.3 J	0.03	0.12 U	ND	0.12 U	ND	0.16 J	0.016	0.12 U	ND	0.12 U	ND	0.12 U	0.25 J	0.16 J	0.12 U
1,2-Dibromoethane	0.4	0.041	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichlorobenzene	0.5	NE	0.17 U	ND	0.17 U	ND	0.17 U	ND	0.17 U	ND	0.17 U	ND	0.17 U	ND	0.17 U	0.17 U	0.17 U	0.17 U
1,2-Dichloroethane	0.4	0.94	0.077 U	ND	0.077 U	ND	0.077 U	ND	0.077 U	ND	0.077 U	ND	0.077 U	ND	0.077 U	0.26 J	0.15 J	0.077 U
1,2-Dichloropropane	0.4	2.4	0.097 U	ND	0.097 U	ND	0.097 U	ND	0.097 U	ND	0.097 U	ND	0.097 U	ND	0.097 U	0.097 U	0.097 U	0.097 U
1,2-Dichlorotetrafluoroethane	0.5	NE	0.11 J	0.011	0.091 U	ND	0.091 U	ND	0.092 J	0.0092	0.091 U	ND	0.091 U	ND	0.12 J	0.091 U	0.13 J	0.12 J
1,3,5-Trimethlybenzene	0.7	6.0	0.15 J	0.015	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	0.13 U	0.13 U	0.13 U
1,3-Butadiene	0.5	0.81	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.055 U	0.12 J	0.055 U	0.055 U
1,3-Dichlorobenzene	0.5	NE	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	0.16 U	0.16 U	0.16 U
1,4-Dichlorobenzene	1.2	2.2	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	ND	0.16 U	0.16 U	0.16 U	0.16 U
1,4-Dioxane	NE	3.2	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	ND	0.29 U	0.29 U	0.29 U	0.29 U
2,2,4-Trimethylpentane	NE	NE	0.092 J	0.0092	0.075 U	ND	0.075 U	ND	0.075 U	ND	0.075 U	ND	0.075 U	ND	0.16 J	0.29 J	0.15 J	0.15 J
2,3-Dihydro-1H-indene	NE	NE	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	ND	0.39 U	0.39 U	0.39 U	0.39 U
2,3-Dimethyl pentane	5.2	NE	0.33 U	ND	0.33 U	ND	0.33 U	ND	0.33 U	ND	0.33 U	ND	0.33 U	ND	0.33 U	0.46	0.33 U	0.33 U
2,3-Dimethylheptane	NE	NE	0.42 U	ND	0.42 U	ND	0.42 U	ND	0.42 U	ND	0.42 U	ND	0.42 U	ND	0.42 U	0.42 U	0.42 U	0.42 U
2-Butanone (MEK)	16	NE	4.6	0.46	1 J	0.1	1.4	0.14	1.4	0.14	0.31 J	0.031	1.2	0.12	0.43 J	1.2	1.9	0.48 J
2-Chlorotoluene	NE	NE	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	0.13 U	0.13 U	0.13 U

TABLE 7
SOIL VAPOR AND OUTDOOR AIR RESULTS
RENSSELAER NON-OWNED MGP SITE
RENSSELAER, NEW YORK

Constituent	NYSDOH Typical Indoor Air Conc. ($\mu g/m^3$) Residential [a]	USEPA Target Indoor Air Conc. ($\mu g/m^3$) Residential [b]	SV-1-09 12/22/2009 ($\mu g/m^3$)	SV-1-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-2-09 12/22/2009 ($\mu g/m^3$)	SV-2-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	DUP122209 12/22/2009 ($\mu g/m^3$)	DUP122209 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-3-09 12/22/2009 ($\mu g/m^3$)	SV-3-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-4-09 12/22/2009 ($\mu g/m^3$)	SV-4-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-5-09 12/22/2009 ($\mu g/m^3$)	SV-5-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	OA-1-09 12/22/2009 ($\mu g/m^3$)	OA-2-09 12/22/2009 ($\mu g/m^3$)	OA-3-09 12/22/2009 ($\mu g/m^3$)	OA-4-09 12/22/2009 ($\mu g/m^3$)
2-Hexanone	NE	NE	0.094 U	ND	0.094 U	ND	0.19 J	0.019	0.13 J	0.013	0.094 U	ND	0.24 J	0.024	0.094 U	0.094 U	0.16 J	0.094 U
2-Methylbutane	NE	NE	1.7	0.17	0.35 J	0.035	0.43 J	0.043	0.16 J	0.016	0.19 J	0.019	0.21 J	0.021	1.1	1.6	1.5	1.2
4-Ethyltoluene	NE	NE	0.21 J	0.021	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	0.13 U	0.13 U	0.13 U
4-Methyl-2-pentanone	1.9	NE	1.5 J	0.15	0.38 J	0.038	1.5 J	0.15	0.95 J	0.095	0.074 UJ	ND	0.61 J	0.061	0.074 UJ	0.074 U	1.7 J	0.074 UJ
Acetone	115	NE	15	1.5	5.7	0.57	8.3	0.83	6	0.6	2.6 J	0.26	5.9	0.59	3.4 J	4.1 J	15	3.9 J
3-Chloropropene	NE	NE	0.059 U	ND	0.059 U	ND	0.059 U	ND	0.059 U	ND	0.059 U	ND	0.059 U	ND	0.059 U	0.059 U	0.059 U	0.059 U
Bromodichloromethane	NE	0.66	1.2	0.12	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	0.12 U	0.12 U	0.12 U
Bromoform	NE	22	0.2 U	ND	0.2 U	ND	0.2 U	ND	0.2 U	ND	0.2 U	ND	0.2 U	ND	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	0.5	NE	0.05 U	ND	0.05 U	ND	0.11 J	0.011	0.05 U	ND	0.05 U	ND	0.05 U	ND	0.05 U	0.05 U	0.05 U	0.05 U
n-Butane	NE	NE	5.4 J	0.54	0.46 J	0.046	0.82 J	0.082	0.087 J	0.0087	0.38 J	0.038	0.43 J	0.043	1.3 J	1.5	2.1 J	1.4 J
Carbon disulfide	NE	NE	0.32 J	0.032	0.2 J	0.02	0.2 J	0.02	0.049 J	0.0049	0.68	0.068	0.037 U	ND	0.037 U	0.037 U	0.037 U	0.037 U
Carbon tetrachloride	1.3	1.6	0.52	0.052	0.094 U	ND	0.094 U	ND	0.098 J	0.0098	0.094 U	ND	0.094 U	ND	0.49 J	0.5	0.52	0.49 J
Chlorobenzene	0.4	NE	0.092 U	ND	0.092 U	ND	0.092 U	ND	0.092 U	ND	0.092 U	ND	0.092 U	ND	0.092 U	0.092 U	0.092 U	0.092 U
Chloroethane	0.4	NE	0.037 U	ND	0.037 U	ND	0.056 J	0.0056	0.037 U	ND	0.037 U	ND	0.037 U	ND	0.037 U	0.037 U	0.037 U	0.037 U
Chloroform	1.2	1.1	9.3	0.93	0.13 J	0.013	0.21 J	0.021	1.1	0.11	0.21 J	0.021	0.076 J	0.0076	0.076 J	0.08 J	0.08 J	0.082 J
Chloromethane	4.2	NE	0.79	0.079	0.15 J	0.015	0.4 J	0.04	0.13 U	ND	0.35 J	0.035	0.3 J	0.03	1.1	1.2	1.3	1.2
cis-1,2-Dichloroethene	0.4	NE	0.095 U	ND	0.095 U	ND	0.095 U	ND	0.095 U	ND	0.095 U	ND	0.095 U	ND	0.095 U	0.095 U	0.095 U	0.095 U
cis-1,3-Dichloropropene	0.4	NE	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	ND	0.13 U	0.13 U	0.13 U	0.13 U
Cyclohexane	6.3	NE	0.09 J	0.009	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.055 U	ND	0.16 J	0.46 J	0.13 J	0.12 J
Dibromochloromethane	NE	0.9	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	ND	0.14 U	0.14 U	0.14 U	0.14 U
Dichlorodifluoromethane	10	NE	2.7	0.27	0.2 J	0.02	0.13 U	ND	0.52	0.052	0.13 J	0.013	0.13 U	ND	2.5	2.4	2.9	2.8
Indene	NE	NE	0.76 U	ND	0.76 U	ND	0.76 U	ND	0.76 U	ND	0.76 U	ND	0.76 U	ND	0.76 U	0.76 U	0.76 U	0.76 U
Isopropyl alcohol	NE	NE	1.5 J	0.15	0.48 J	0.048	0.6 J	0.06	1 J	0.1	0.19 J	0.019	0.39 J	0.039	0.24 J	0.39 J	0.71 J	0.33 J
Isopropylbenzene	0.8	NE	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	ND	0.12 U	0.12 U	0.12 U	0.12 U
Methylene chloride	16	52	0.063 U	ND	0.063 U	ND	0.063 U	ND	0.89	0.089	0.063 U	ND	0.063 U	ND	0.063 U	0.063 U	1	0.063 U
n-Butylcyclohexane	NE	NE	0.46 U	ND	0.46 U	ND	0.46 U	ND	0.46 U	ND	0.46 U	ND	0.46 U	ND	0.46 U	0.46 U	0.46 U	0.46 U
n-Decane	15	NE	1.1 J	0.11	0.13 U	ND	0.76 J	0.076	1.5 J	0.15	0.13 U	ND	0.13 U	ND	0.13 U	0.13 U	0.24 J	0.13 U
n-Dodecane	9.2	NE	0.22 U	ND	0.22 U	ND	0.22 U	ND	0.24 J	0.024	0.22 U	ND	0.22 U	ND	0.22 U	0.22 U	0.22 U	0.22 U
n-Heptane	18	NE	0.15 J	0.015	0.078 U	ND	0.078 U	ND	0.078 U	ND	0.078 U	ND	0.1 J	0.01	0.25 J	1.3	0.26 J	0.25 J
n-Hexane	14	NE	0.4 J	0.04	0.18 J	0.018	0.14 J	0.014	0.17 J	0.017	0.18 J	0.018	0.25 J	0.025	0.45 J	1.1	0.8	0.46 J
Nonane	7.9	NE	0.18 J	0.018	0.089 U	ND	0.089 U	ND	0.16 J	0.016	0.089 U	ND	0.13 J	0.013	0.089 U	0.16 J	0.16 J	0.089 U
n-Octane	5.2	NE	0.097 J	0.0097	0.065 U	ND	0.065 U	ND	0.065 U	ND	0.48 J	0.048	0.095 J	0.0095	0.1 J	0.26 J	0.11 J	0.065 U
Pentane	NE	NE	0.49 J	0.049	0.15 J	0.015	0.29 J	0.029	0.071 U	ND	0.13 J	0.013	0.071 U	ND	0.8 J	1.2	0.77 J	0.72 J
n-Undecane	12	NE	0.3 J	0.03	0.16 U	ND	0.51 J	0.051	0.83 J	0.083	0.16 U	ND	0.16 U	ND	0.16 U	0.16 U	0.26 J	0.16 U
Styrene	1.4	NE	0.098 U	ND	0.098 U	ND	0.098 U	ND	0.098 U	ND	0.098 U	ND	0.098 U	ND	0.098 U	0.098 U	0.098 U	0.098 U
tert-Butyl alcohol	NE	NE	0.84 J	0.084	0.12 J	0.012	0.25 J	0.025	0.15 J	0.015	0.045 U	ND	0.38 J	0.038	0.053 J	0.077 J	0.28 J	0.082 J
Methyl tert-butyl ether	14	94	0.25 U	ND	0.25 U	ND	0.25 U	ND	0.25 U	ND	0.25 U	ND	0.25 U	ND	0.25 U	0.25 U	0.25 U	0.25 U
Tetrachloroethene	2.5	4.1	0.58	0.058	0.18 J	0.018	0.83 J	0.083	1300	**130**	0.62	0.062	0.24 J	0.024	0.15 J	0.72	0.11 U	0.11 U

TABLE 7
SOIL VAPOR AND OUTDOOR AIR RESULTS
RENSSELAER NON-OWNED MGP SITE
RENSSELAER, NEW YORK

Constituent	NYSDOH Typical Indoor Air Conc. ($\mu g/m^3$) Residential [a]	USEPA Target Indoor Air Conc. ($\mu g/m^3$) Residential [b]	SV-1-09 12/22/2009 ($\mu g/m^3$)	SV-1-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-2-09 12/22/2009 ($\mu g/m^3$)	SV-2-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	DUP122209 12/22/2009 ($\mu g/m^3$)	DUP122209 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-3-09 12/22/2009 ($\mu g/m^3$)	SV-3-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-4-09 12/22/2009 ($\mu g/m^3$)	SV-4-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	SV-5-09 12/22/2009 ($\mu g/m^3$)	SV-5-09 Attenuation Factor Applied[c] ($\mu g/m^3$)	OA-1-09 12/22/2009 ($\mu g/m^3$)	OA-2-09 12/22/2009 ($\mu g/m^3$)	OA-3-09 12/22/2009 ($\mu g/m^3$)	OA-4-09 12/22/2009 ($\mu g/m^3$)
Thiopene	NE	NE	0.28 U	ND	0.28 U	ND	0.28 U	ND	0.28 U	ND	0.28 U	ND	0.28 U	ND	0.28 U	0.28 U	0.28 U	0.28 U
trans-1,2-Dichloroethene	NE	NE	0.079 U	ND	0.079 U	ND	0.079 U	ND	0.079 U	ND	0.079 U	ND	0.079 U	ND	0.079 U	0.079 U	0.079 U	0.079 U
trans-1,3-Dichloropropene	NE	NE	0.086 U	ND	0.086 U	ND	0.086 U	ND	0.086 U	ND	0.086 U	ND	0.086 U	ND	0.086 U	0.086 U	0.086 U	0.086 U
Trichloroethene	0.5	12	0.075 U	ND	0.075 U	ND	0.075 U	ND	0.45	0.045	0.075 U	ND	0.075 U	ND	0.075 U	0.075 U	0.075 U	0.075 U
Trichlorofluoromethane	12	NE	1.3	0.13	8.4	0.84	8	0.8	1.3	0.13	1.3	0.13	1.1	0.11	1.4	1.4	1.5	1.4
Vinyl bromide	NE	0.76	0.061 U	ND	0.061 U	ND	0.061 U	ND	0.061 U	ND	0.061 U	ND	0.061 U	ND	0.061 U	0.061 U	0.061 U	0.061 U
Vinyl chloride	0.4	1.6	0.074 U	ND	0.074 U	ND	0.074 U	ND	0.074 U	ND	0.074 U	ND	0.074 U	ND	0.074 U	0.074 U	0.074 U	0.074 U

Notes:
U - The analyte was analyzed for, but was not detected. Value shown is representative of the method detection limit for the analyzed constituent.
J - Estimated concentration. The result is below the quantitation limit but above the method detection limit.
UJ - The analyte was not detected above the reported sample quantitation limit. However, based on data validation, the reported method detection limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte in the sample.
ND - Not Detected
NE - Not established

Boxed concentrations are above NYSDOH typical indoor air concentrations or USEPA regional screening levels.

($\mu g/m^3$) - micrograms per cubic meter

(a) From "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH October 2006). As recommended by NYSDOH, typical inodor air concentrations in residential settings are the Upper Fence values from the NYSDOH Fuel Oil Study data.
(b) From "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (USEPA November 2002), updated using recently developed "Regional Screening Levels for Chemical Contaminants at Superfund Sites, Residential Indoor Air" (USEPA April 2009). An incremental individual lifetime cancer risk level of 10^{-5} is used for residential settings consistent with the document "Standard Operating Procedures for Soil Vapor Intrusion Evaluations at National Grid MGP Sites in New York State" (O'Brien & Gere, September 2007).
(c) For purposes of comparing against applicable criteria, an attenuation factor of 0.1 was used for shallow soil vapor, as recommended in Table 2b from the document "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (USEPA November 2002).

FIGURES

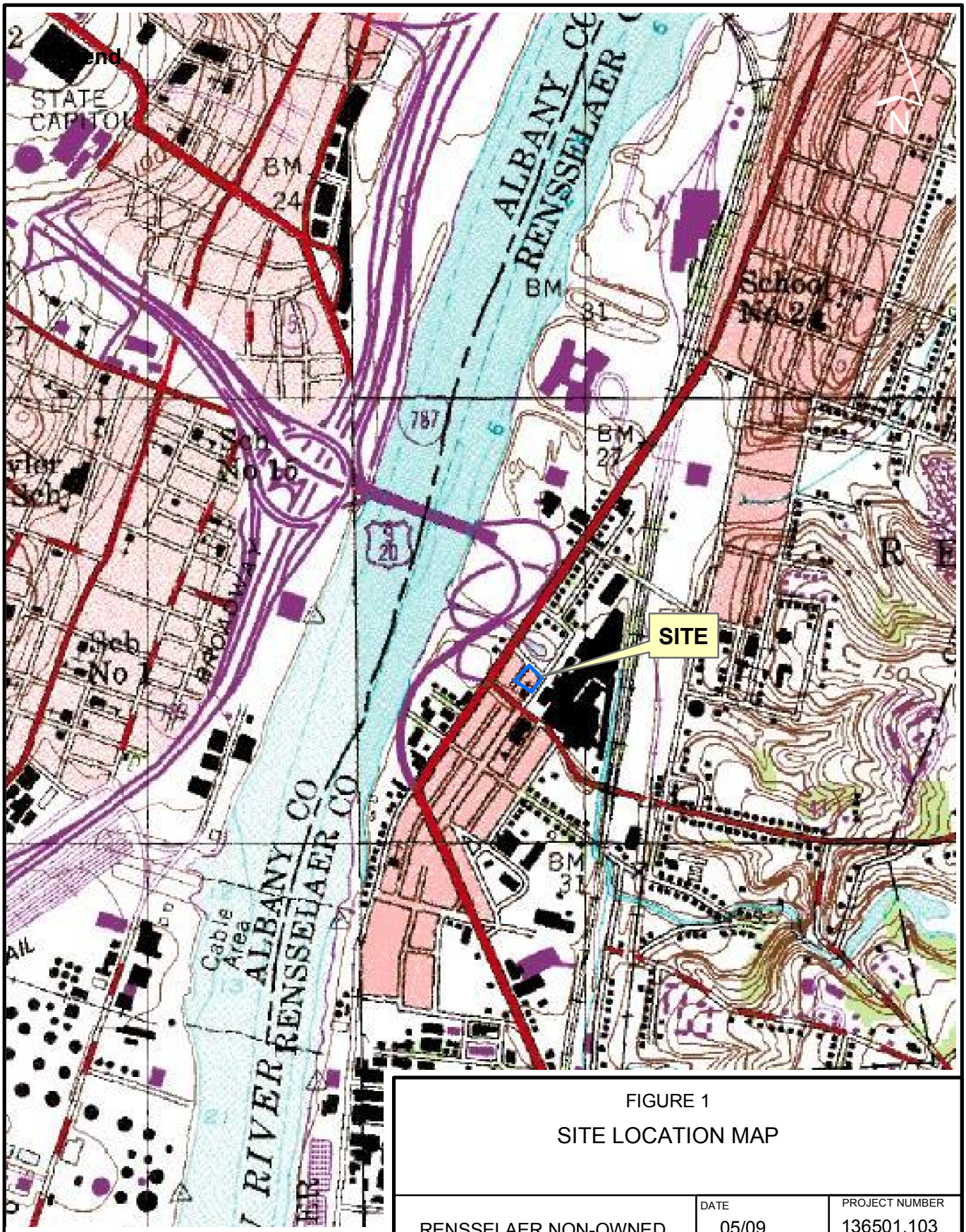


FIGURE 1

SITE LOCATION MAP

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE	PROJECT NUMBER
05/09	136501.103

BROWN AND CALDWELL
ALLENDALE, NEW JERSEY

P:/GIS/National_Grid/Rensselaer/Rensselaer_Site_Location.mxd

LEGEND:

- MONITORING WELL
- SEWER MANHOLE
- UTILITY POLE
- LIGHT POLE
- HYDRANT
- OVERHEAD TELEPHONE
- OVERHEAD ELECTRIC
- OVERHEAD CABLE
- SEWER LINE
- PAVEMENT EDGE
- GROUND SURFACE ELEVATION
- PROPERTY LINE
- GEOLOGIC CROSS SECTION ORIENTATION
- FORMER MGP STRUCTURE LOCATION
- STAFF GAUGE
- SOIL SAMPLE
- TEST PIT
- SOIL VAPOR PROBE

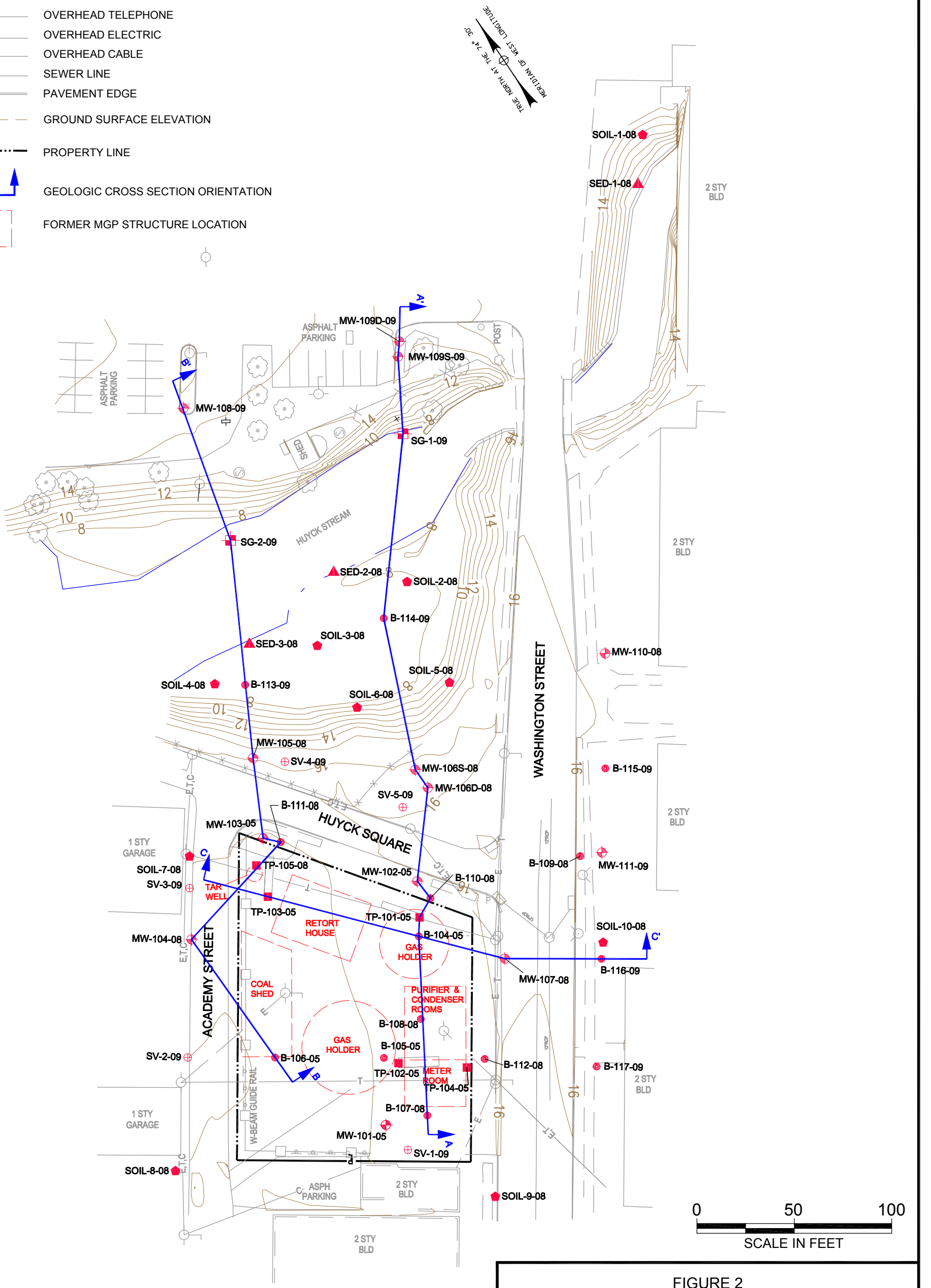


FIGURE 2

SITE PLAN

RENSSELAER NON-OWNED
FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 2/10

PROJECT NUMBER 136501.106

BROWN AND CALDWELL
ASSOCIATES

P:\DRAFTING\NATIONAL_GRID\RENSSELAER\136501.106\FIGURE 2 (SITE-PLAN).DWG 04/26/2010 10:53:19AM By:rjames XREFS: Basemap_2-4-10 Layout: Layout1

LEGEND:

- MONITORING WELL
- SOIL BORING
- PAVEMENT EDGE
- GROUND SURFACE ELEVATION CONTOUR (FT., NGVD)
- PROPERTY LINE
- 8 — TOP OF BEDROCK ELEVATION CONTOUR (FT., NGVD) DASHED WHERE INFERRED
- -3.2 — TOP OF BEDROCK ELEVATION (FT., NGVD)
- FORMER MGP STRUCTURE LOCATION

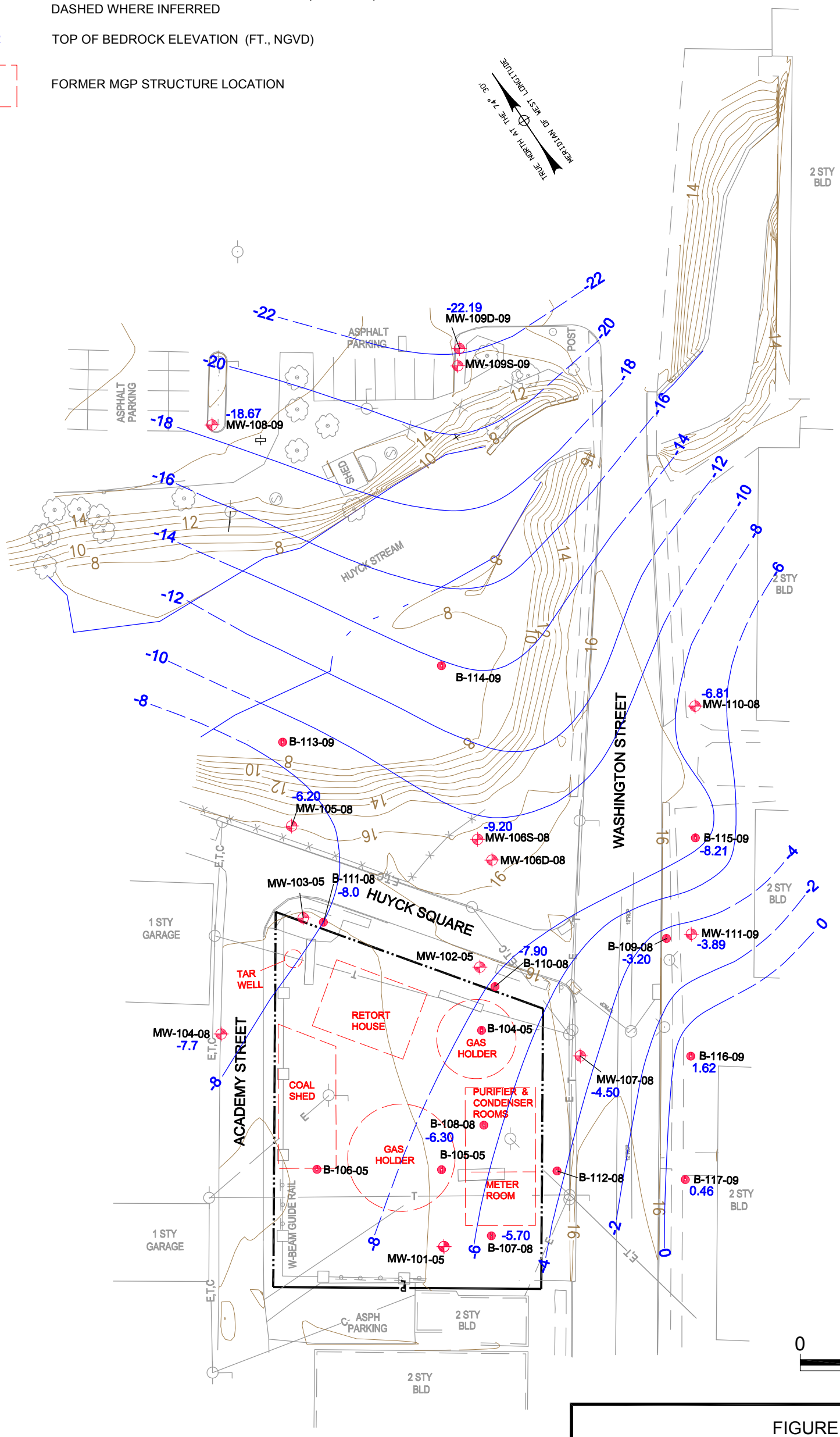


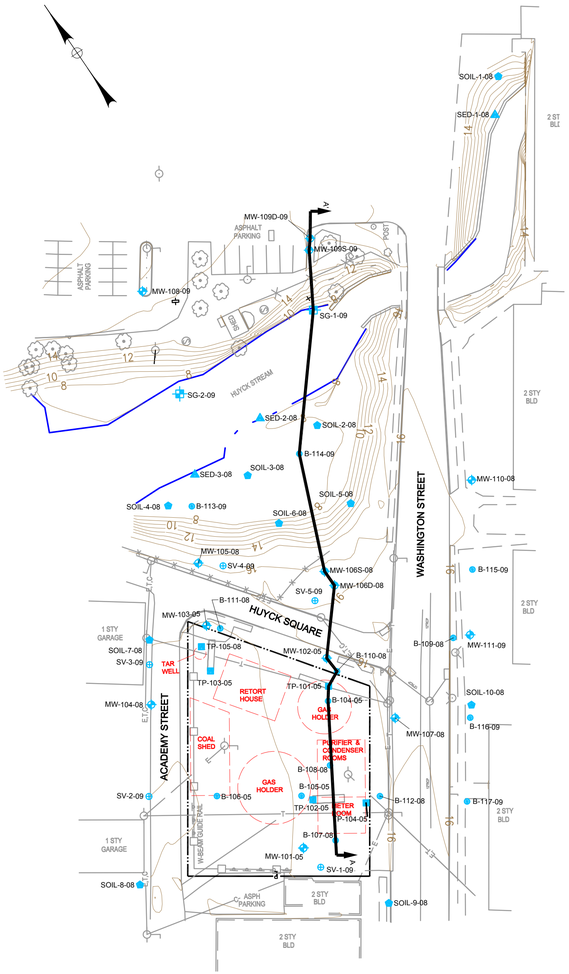
FIGURE 3
TOP OF BEDROCK SURFACE CONTOUR MAP

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

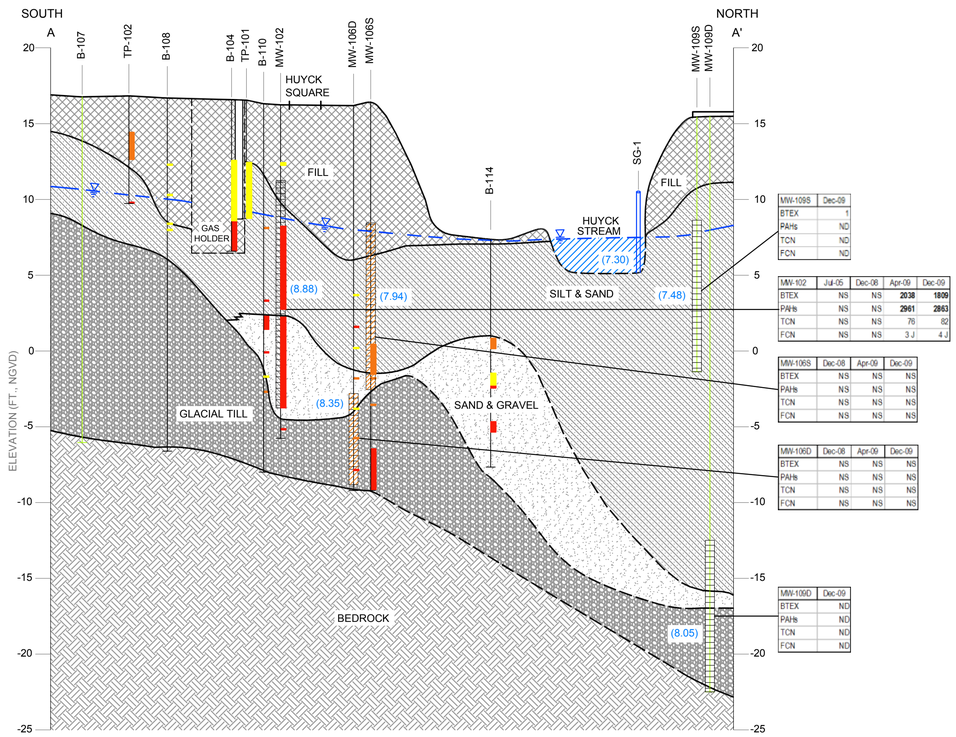
DATE	PROJECT NUMBER
2/10	136501.106

BROWN AND CALDWELL ASSOCIATES

P:\DRAFTING\NATIONAL_GRID\RENSSELAER\136501.106\FIGURE 3 (TOP_OF_BEDROCK_SURFACE).DWG 04/26/2010 10:55:46AM By:rjames XREFS: Basemap_2-4-10 Layout: Layout1



ALIGNMENT VIEW



MW-109S	Dec-09
BTEX	1
PAHs	ND
TCN	ND
FCN	ND

MW-102	Jul-05	Dec-08	Apr-09	Dec-09
BTEX	NS	NS	**2038**	**1809**
PAHs	NS	NS	**2961**	**2863**
TCN	NS	NS	76	82
FCN	NS	NS	3 J	4 J

MW-106S	Dec-08	Apr-09	Dec-09
BTEX	NS	NS	NS
PAHs	NS	NS	NS
TCN	NS	NS	NS
FCN	NS	NS	NS

MW-106D	Dec-08	Apr-09	Dec-09
BTEX	NS	NS	NS
PAHs	NS	NS	NS
TCN	NS	NS	NS
FCN	NS	NS	NS

MW-109D	Dec-09
BTEX	ND
PAHs	ND
TCN	ND
FCN	ND

50 0 50 100
scale HORIZONTAL feet

5 0 5 10
scale VERTICAL feet

LEGEND:

MW-111S — GENERALIZED GROUND SURFACE

WELL SCREEN INTERVAL
PVC SUMP
TOTAL DEPTH OF BOREHOLE

NAPL OBSERVED WITHIN WELL CASING DURING 2009/2010 GAUGING EVENTS

FILL
SILT & SAND DEPOSITS
SAND & GRAVEL
GLACIAL TILL
BEDROCK

NO IMPACTS OBSERVED
HYDROCARBON ODORS
SHEENS OR STAINING PRESENT
NAPL OBSERVED

APPROXIMATE LOCATION OF SUBSURFACE STRUCTURE, DEPTH TO BASE OF STRUCTURE UNKNOWN

WATER TABLE, DECEMBER 2009 (DASHED WHERE INFERRED)

(7.48) — WATER ELEVATION, 12-10-09

MW-103	Dec-08	April-09 *
BTEX	**25**	**12**
PAHs	**37**	**33**
TCN	149 J	111
FCN	2 J	2 J

GROUNDWATER QUALITY DATA. VALUES REPORTED IN MICROGRAMS PER LITER (ug/L)

* TABLE LISTS HIGHEST CONCENTRATIONS FROM ORIGINAL AND DUPLICATE SAMPLE

ABBREVIATIONS:

BTEX	BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE ISOMERS
PAHS	POLYCYCLIC AROMATIC HYDROCARBONS
TCN	TOTAL CYANIDE
FCN	FREE CYANIDE
NS	NOT SAMPLED DUE TO NAPL PRESENCE
ND	NOT DETECTED
NA	NOT ANALYZED

NOTE:

BOLD VALUE INDICATES ONE OR MORE CONSTITUENTS ARE ABOVE CLASS GA CRITERIA.

BROWN AND CALDWELL ASSOCIATES
ALLENDALE, NEW JERSEY

SUBMITTED: FRANK WILLIAMS, PROJECT MANAGER DATE: 02/10
APPROVED: BROWN AND CALDWELL DATE:

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: JLM
DRAWN: RMJ
CHECKED: JLM
CHECKED:
APPROVED:

EXTERNAL REFERENCES

JEFFREY R. CAPUTI
PROFESSIONAL ENGINEER
N.Y. LICENSE NO. 082196-1
DATE

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 4
HYDROGEOLOGIC CROSS-SECTIONS A-A'

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME: -
BC PROJECT NUMBER: 136501.103
CLIENT PROJECT NUMBER:
DRAWING NUMBER: -
SHEET NUMBER: OF

Apr 26, 2010 - 4:17pm jjames
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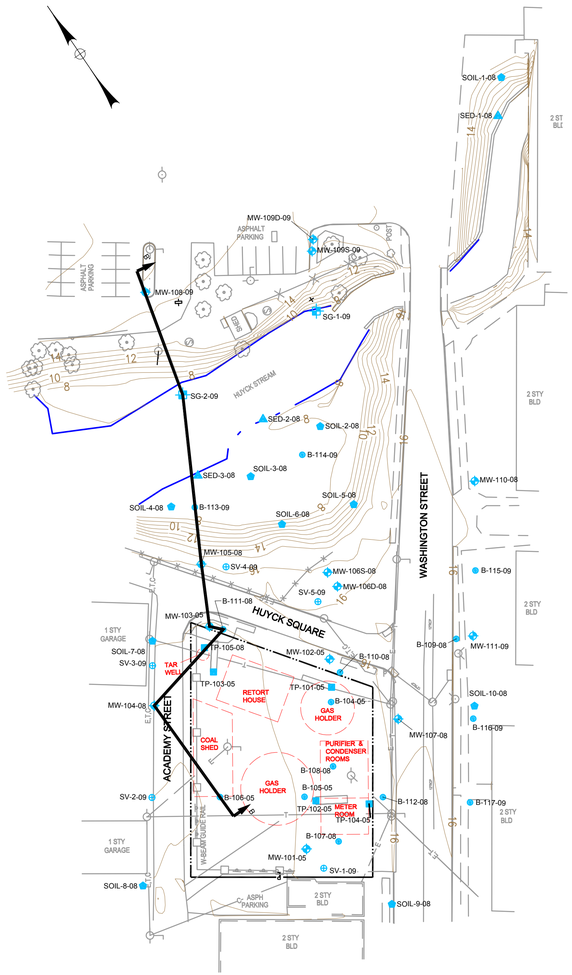

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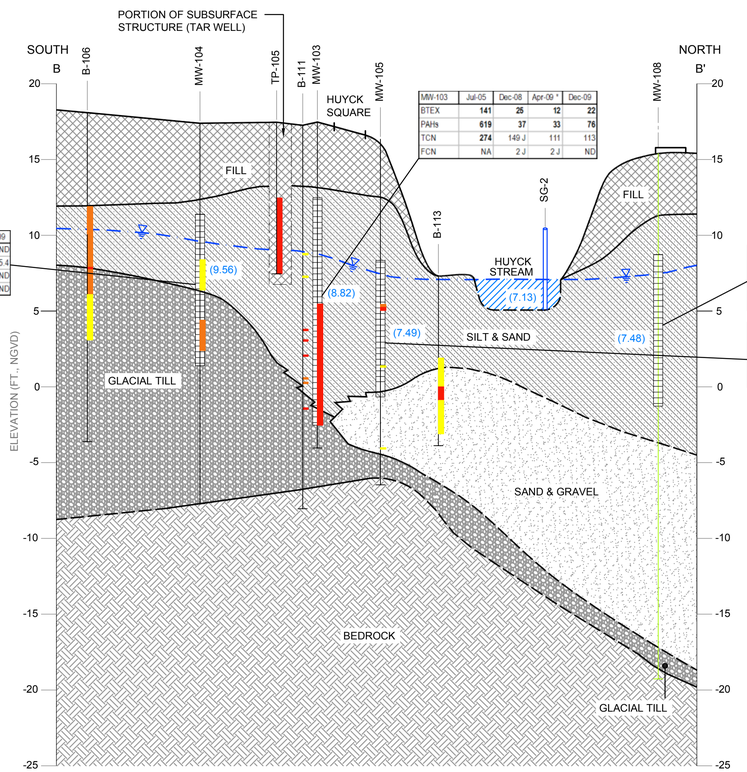


MW-104	Dec-08 *	Apr-09	Dec-09
BTEX	ND	0.95	ND
PAHs	5.0	2.7	5.4
TCN	ND	ND	ND
FCN	ND	ND	ND

MW-103	Jul-05	Dec-08	Apr-09 *	Dec-09
BTEX	**141**	**25**	**12**	**22**
PAHs	**619**	**37**	**33**	**76**
TCN	**274**	149 J	111	113
FCN	NA	2 J	2 J	ND

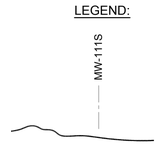
MW-108	Dec-09 *
BTEX	ND
PAHs	ND
TCN	ND
FCN	ND

MW-105	Dec-08	Apr-09	Dec-09
BTEX	**15**	6.2	2.8
PAHs	**92**	**58**	**92**
TCN	129 J	169	124
FCN	ND	5 J	ND

50 0 50 100
scale HORIZONTAL feet

5 0 5 10
scale VERTICAL feet

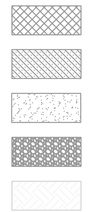
LEGEND:



GENERALIZED GROUND SURFACE

WELL SCREEN INTERVAL
PVC SUMP
TOTAL DEPTH OF BOREHOLE

NAPL OBSERVED WITHIN WELL CASING DURING 2009/2010 GAUGING EVENTS



FILL
SILT & SAND DEPOSITS
SAND & GRAVEL
GLACIAL TILL
BEDROCK

NO IMPACTS OBSERVED
HYDROCARBON ODORS
SHEENS OR STAINING PRESENT
NAPL OBSERVED

APPROXIMATE LOCATION OF SUBSURFACE STRUCTURE, DEPTH TO BASE OF STRUCTURE UNKNOWN

WATER TABLE, DECEMBER 2009 (DASHED WHERE INFERRED)

(7.48) WATER ELEVATION, 12-10-09

MW-103	Dec-08	April-09 *
BTEX	**25**	**12**
PAHs	**37**	**33**
TCN	149 J	111
FCN	2 J	2 J

GROUNDWATER QUALITY DATA. VALUES REPORTED IN MICROGRAMS PER LITER (ug/L)

* TABLE LISTS HIGHEST CONCENTRATIONS FROM ORIGINAL AND DUPLICATE SAMPLE

ABBREVIATIONS:

BTEX	BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE ISOMERS
PAHS	POLYCYCLIC AROMATIC HYDROCARBONS
TCN	TOTAL CYANIDE
FCN	FREE CYANIDE
NS	NOT SAMPLED DUE TO NAPL PRESENCE
ND	NOT DETECTED
NA	NOT ANALYZED

NOTE:

BOLD VALUE INDICATES ONE OR MORE CONSTITUENTS ARE ABOVE CLASS GA CRITERIA.

BROWN AND CALDWELL ASSOCIATES
ALLENDALE, NEW JERSEY

SUBMITTED: FRANK WILLIAMS, PROJECT MANAGER DATE: 02/10
APPROVED: BROWN AND CALDWELL DATE:

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: JLM
DRAWN: RMJ
CHECKED: JLM
CHECKED:
APPROVED:

EXTERNAL REFERENCES

JEFFREY R. CAPUTI
PROFESSIONAL ENGINEER
N.Y. LICENSE NO. 082196-1
DATE

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 5
HYDROGEOLOGIC CROSS-SECTIONS B-B'

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME -
BC PROJECT NUMBER 136501.103
CLIENT PROJECT NUMBER
DRAWING NUMBER -
SHEET NUMBER OF

Apr 26, 2010 - 4:00pm james
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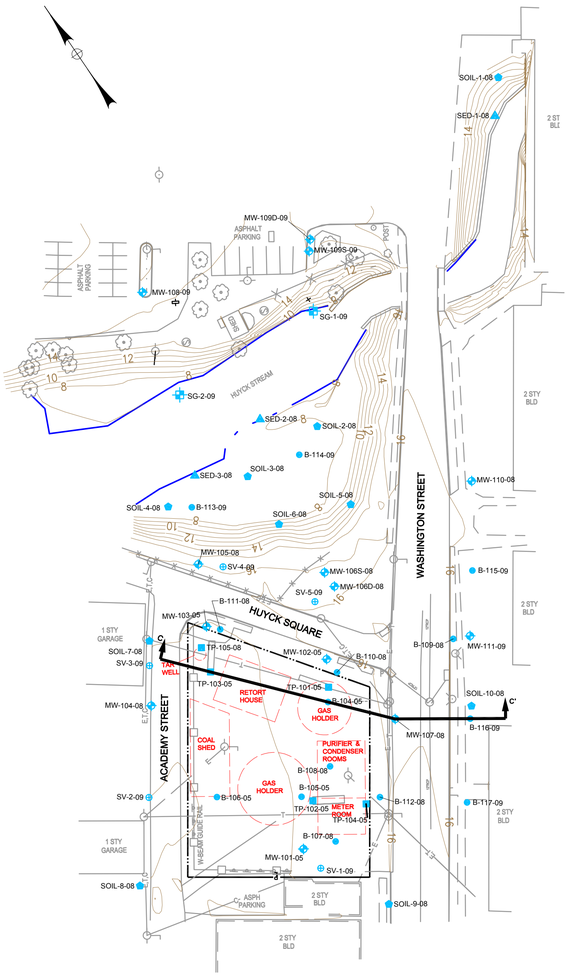
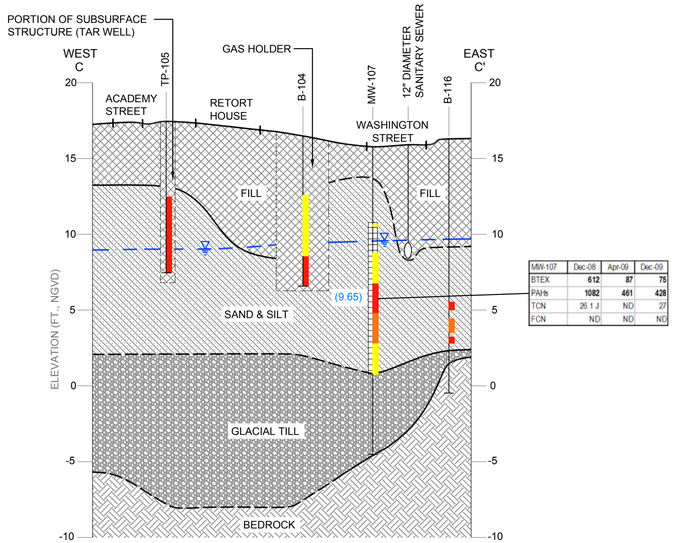


ALIGNMENT VIEW



MW-107	Dec-08	Apr-09	Dec-09
BTEX	**612**	**87**	**75**
PAHs	**1082**	**461**	**428**
TCN	26.1 J	ND	27
FCN	ND	ND	ND

50 0 50 100
scale HORIZONTAL feet

5 0 5 10
scale VERTICAL feet

LEGEND:

MW-111S — GENERALIZED GROUND SURFACE

WELL SCREEN INTERVAL
PVC SUMP
TOTAL DEPTH OF BOREHOLE

NAPL OBSERVED WITHIN WELL CASING DURING 2009/2010 GAUGING EVENTS

FILL
SILT & SAND DEPOSITS
SAND & GRAVEL
GLACIAL TILL
BEDROCK

NO IMPACTS OBSERVED

HYDROCARBON ODORS
SHEENS OR STAINING PRESENT
NAPL OBSERVED

APPROXIMATE LOCATION OF SUBSURFACE STRUCTURE, DEPTH TO BASE OF STRUCTURE UNKNOWN

WATER TABLE, DECEMBER 2009 (DASHED WHERE INFERRED)

(7.48) WATER ELEVATION, 12-10-09

MW-103	Dec-08	April-09 *
BTEX	**25**	**12**
PAHs	**37**	**33**
TCN	149 J	111
FCN	2 J	2 J

GROUNDWATER QUALITY DATA. VALUES REPORTED IN MICROGRAMS PER LITER (ug/L)

* TABLE LISTS HIGHEST CONCENTRATIONS FROM ORIGINAL AND DUPLICATE SAMPLE

ABBREVIATIONS:

BTEX	BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE ISOMERS
PAHS	POLYCYCLIC AROMATIC HYDROCARBONS
TCN	TOTAL CYANIDE
FCN	FREE CYANIDE
NS	NOT SAMPLED DUE TO NAPL PRESENCE
ND	NOT DETECTED
NA	NOT ANALYZED

NOTE:

BOLD VALUE INDICATES ONE OR MORE CONSTITUENTS ARE ABOVE CLASS GA CRITERIA.

Apr 28, 2010 - 4:05pm jjames
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BROWN AND CALDWELL ASSOCIATES
ALLENDALE, NEW JERSEY

SUBMITTED: FRANK WILLIAMS, PROJECT MANAGER DATE: 02/10
APPROVED: BROWN AND CALDWELL DATE:

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

DESIGNED: JLM
DRAWN: RMJ
CHECKED: JLM
CHECKED:
APPROVED:

EXTERNAL REFERENCES

JEFFREY R. CAPUTI
PROFESSIONAL ENGINEER
N.Y. LICENSE NO. 082196-1
DATE

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 6
HYDROGEOLOGIC CROSS-SECTIONS C-C'

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME -
BC PROJECT NUMBER 136501.103
CLIENT PROJECT NUMBER
DRAWING NUMBER -
SHEET NUMBER OF

LEGEND:

- MONITORING WELL
- STAFF GUAGE
- PAVEMENT EDGE
- GROUND SURFACE ELEVATION CONTOUR (FT., NGVD)
- PROPERTY LINE
- 8 — WATER TABLE ELEVATION CONTOUR (FT., NGVD) DASHED WHERE INFERRED
- 7.30 — WATER ELEVATION (FT., NGVD)
- FORMER MGP STRUCTURE LOCATION
- GENERALIZED DIRECTION OF GROUNDWATER FLOW

WELL SCREEN POSITIONED SEVERAL FEET BELOW WATER TABLE. POSTED WATER ELEVATION NOT USED IN CONTOURING, AS DATA ARE NOT REPRESENTATIVE OF WATER TABLE CONDITIONS.

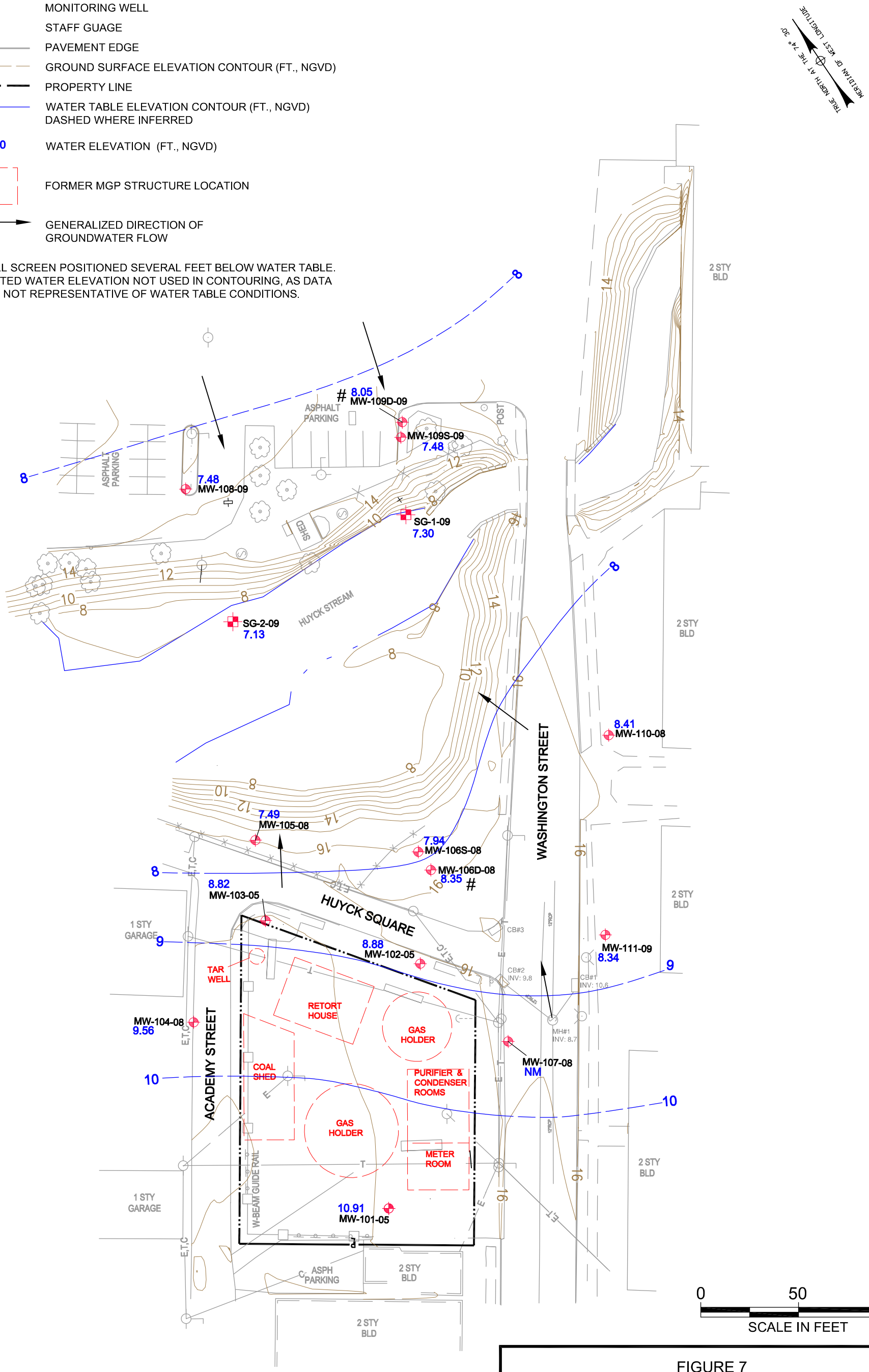

FIGURE 7

WATER TABLE CONTOUR MAP
DECEMBER 10, 2009

	DATE	PROJECT NUMBER
RENSSELAER NON-OWNED FORMER MGP SITE RENSSELAER, NEW YORK	2/10	136501.106

BROWN AND CALDWELL ASSOCIATES

P:\DRAFTING\NATIONAL_GRID\RENSSELAER\136501.106\FIGURE 7 (WATER_TABLE_CONTOUR_SURFACE).DWG 04/26/2010 11:22:17AM By:rjames XREFS: Basemap_2-4-10 Layout: Layout1

MW-108-09	16-18	22-24
Total BTEX	0.00064	0.00073
Total PAHs	1.2	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-109D-09	14-16	26-28
Total BTEX	0.00059	0.0041
Total PAHs	ND	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

SOIL1-08	0.5-1	3-3.5
Total BTEX	ND	ND
Total PAHs	ND	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

B-114-09	8.5-9.5	13-15
Total BTEX	0.17	0.0081
Total PAHs	**137**	0.37
Total Cyanide	ND	ND
Free Cyanide	ND	ND

SOIL3-08	0.5-1	3-3.5
Total BTEX	ND	0.0085
Total PAHs	2.5	10
Total Cyanide	ND	ND
Free Cyanide	ND	ND

SOIL2-08	0.5-1	3.5-4
Total BTEX	0.0008	ND
Total PAHs	4.2	**14**
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-110-09	12-14	20-22
Total BTEX	0.0028	0.00057
Total PAHs	5.9	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

B-113-09	7.5-8.5	10-11
Total BTEX	**0.28**	0.00037
Total PAHs	**339**	0.11
Total Cyanide	1.4	ND
Free Cyanide	0.0916J	ND

MW-106S08	16-18	22-24
Total BTEX	0.44	**75**
Total PAHs	**57**	**494**
Total Cyanide	ND	ND
Free Cyanide	ND	ND

SOIL4-08	0.5-1	3-3.5
Total BTEX	0.001	ND
Total PAHs	4.2	4.8
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-106D08	20-22	24-26
Total BTEX	**0.83**	**33**
Total PAHs	**4.1**	**36**
Total Cyanide	ND	ND
Free Cyanide	0.013 J	0.04 J

MW-105-08	10-12	22-24
Total BTEX	0.13	0.074
Total PAHs	**179**	0.69
Total Cyanide	ND	ND
Free Cyanide	0.014 J	ND

B-115-09	10-12	18-20
Total BTEX	0.012	0.0034
Total PAHs	**64**	0.37
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-102-05	8-10	20-22
Total BTEX	0.013	**8**
Total PAHs	**55**	**69**
Total Cyanide	ND	ND
Free Cyanide	NA	NA

MW-103-05	12-14	18-20
Total BTEX	0.0065	0.34
Total PAHs	3.2	5.5
Total Cyanide	19	ND
Free Cyanide	NA	NA

MW-111-09	10-11*	16-18
Total BTEX	0.0099	0.0095
Total PAHs	**30**	0.22
Total Cyanide	5.7	ND
Free Cyanide	0.0306J	ND

B-111-08	14-16	22-24
Total BTEX	**16**	0.03
Total PAHs	**208**	0.12
Total Cyanide	ND	ND
Free Cyanide	ND	ND

B-109-08	10-12	16-18
Total BTEX	0.036	0.014
Total PAHs	4.1	0.49
Total Cyanide	1.68	ND
Free Cyanide	0.017 J	ND

B-110-08	8-10	12-14	18-20
Total BTEX	**46**	**1721**	**86**
Total PAHs	**291**	**1323**	**214**
Total Cyanide	ND	ND	ND
Free Cyanide	ND	0.014 J	ND

TP-105-08	2-5	4-5	6-8
Total BTEX	ND	**877**	ND
Total PAHs	**227**	**17860**	0.27
Total Cyanide	10.8	5.99	2.12
Free Cyanide	0.014 J	0.024 J	0.015 J

B-116-09	11-12	13-14
Total BTEX	0.0045	0.035
Total PAHs	**19**	**180**
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-104-08	5-7	17-19*
Total BTEX	0.0013	0.0044
Total PAHs	ND	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-107-08	9-11	19-21
Total BTEX	**5.2**	0.0038
Total PAHs	**70**	0.2
Total Cyanide	ND	ND
Free Cyanide	ND	ND

TP-101-05	0.3-4.1
Total BTEX	**0.8**
Total PAHs	NA
Total Cyanide	NA
Free Cyanide	NA

B-106-05	8-10
Total BTEX	0.15
Total PAHs	3.9
Total Cyanide	ND
Free Cyanide	NA

B-108-08	8-10	19-21
Total BTEX	**41**	0.031
Total PAHs	**134**	0.11
Total Cyanide	ND	ND
Free Cyanide	0.014 J	0.019 J

B-117-09	8-10	10-12
Total BTEX	0.002	0.00065
Total PAHs	ND	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

B-105-05	10-12
Total BTEX	ND
Total PAHs	13
Total Cyanide	ND
Free Cyanide	NA

TP-102-05	2.4-4.2
Total BTEX	**7.2**
Total PAHs	5.8
Total Cyanide	4.21
Free Cyanide	NA

MW-101-05	4-6	10-12
Total BTEX	0.0095	0.0019
Total PAHs	ND	ND
Total Cyanide	ND	ND
Free Cyanide	NA	NA

B-107-08	8-10	10-12*
Total BTEX	0.0030	0.0062
Total PAHs	ND	0.18
Total Cyanide	ND	ND
Free Cyanide	0.013 J	0.014 J

TP-104-05	3.3-7*
Total BTEX	**13.6**
Total PAHs	**49**
Total Cyanide	ND
Free Cyanide	NA

B-112-08	8-10	15-17
Total BTEX	**1.5**	0.0029
Total PAHs	**140**	0.056
Total Cyanide	ND	ND
Free Cyanide	ND	ND

HUYCK STREAM

HUYCK SQUARE

WASHINGTON STREET

ACADEMY STREET

TAR WELL

RETORT HOUSE

GAS HOLDER

COAL SHED

PURIFIER & CONDENSER ROOMS

GAS HOLDER

METER ROOM

N

0 25 50 100 Feet

Legend

- Monitoring Well: green symbol indicates no exccedance of SCOs; red symbol indicates one or more constituents exceed SCO(s)
- Soil Boring: green symbol indicates no exccedance of SCOs; red symbol indicates one or more constituents exceed SCO(s)
- Soil Sample: green symbol indicates no exccedance of SCOs; red symbol indicates one or more constituents exceed SCO(s)
- Test Pit Sample: green symbol indicates no exccedance of SCOs; red symbol indicates one or more constituents exceed SCO(s)
- Ground Surface Elevation Contour (ft., NGVD)
- Property Line
- Pavement Edge
- Water
- Former MGP Structure Location.

Explanation of terms and abbreviations:
BTEX - Benzene, Tolune, Ethylbenzene, Xylenes
PAHs - Polycyclic Aromatic Hydrocarbons
Bold Value - Indicates one or more constituents are above NYS Part 375 Soil Cleanup Objectives
ND - Not Detected
J - Estimated concentration
NA - Not Analyzed

Results reported in milligrams per kilogram (mg/kg)

* - Table lists the highest concentration from original and duplicate sample

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FIGURE 8

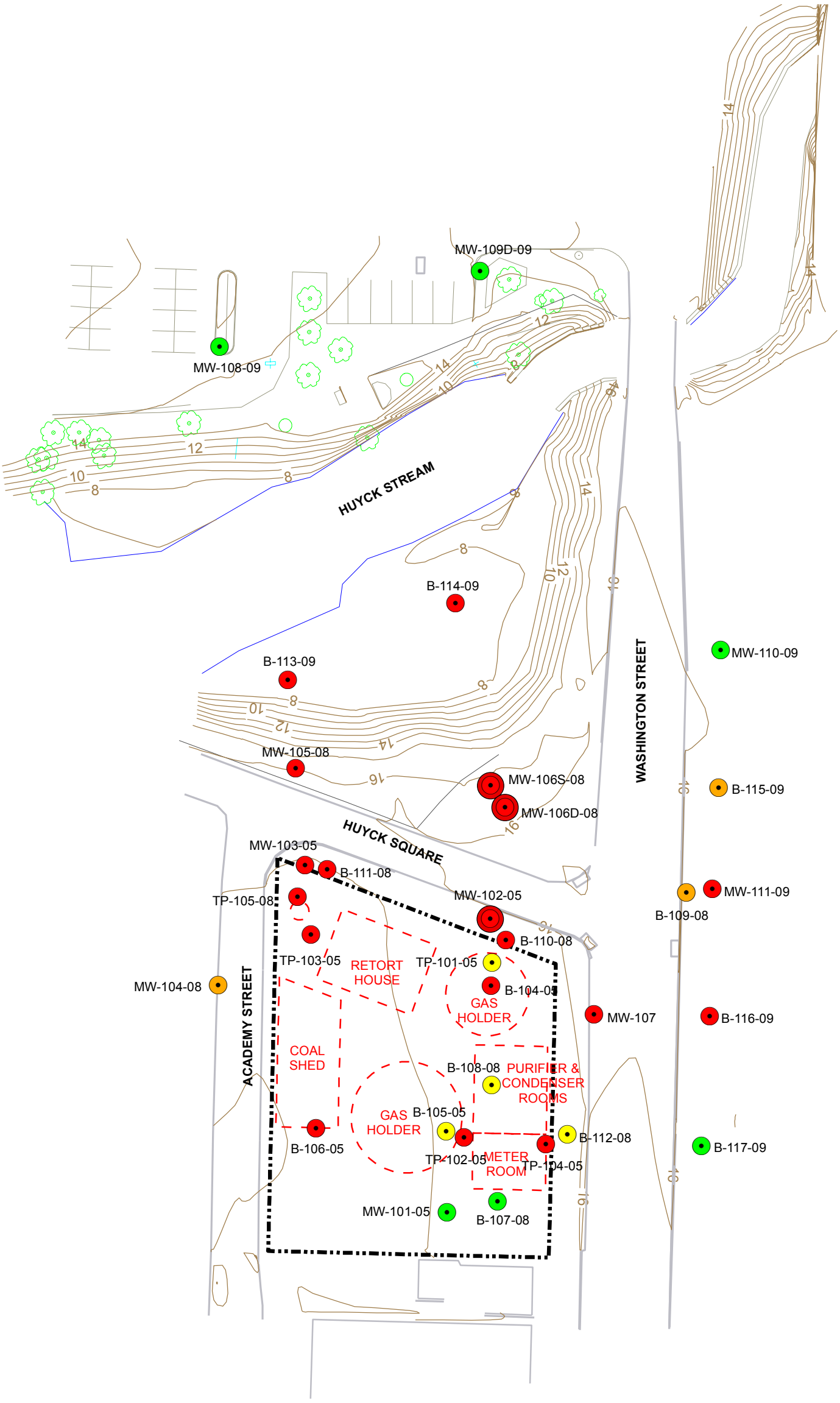
BTEX, PAHs, AND CYANIDE CONCENTRATIONS IN SUBSURFACE SOIL FROM SC AND RI SOIL SAMPLES

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 01/22/2010

PROJECT NUMBER 136501.106

BROWN AND CALDWELL ASSOCIATES



Legend

- Ground Surface Elevation Contour (ft., NGVD)
- Property Line
- Pavement Edge
- Water
- Former MGP Structure Location.

- No impacts observed in soil boring
- Hydrocarbon odors observed in soil boring
- Sheens and hydrocarbon odors observed in soil boring
- NAPL/Tar observed in soil boring
- NAPL/Tar observed in soil boring and in monitoring well during gauging events

Note:
Refer to Table 4 for descriptions and depth intervals of NAPL observations, and to Figure 4 (Hydrogeologic Cross-Sections) for vertical position of observations.

0 25 50 100 Feet

FIGURE 9

VISUAL/OLFACTORY OBERVATIONS

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 04/09/10

PROJECT NUMBER 136501.106

BROWN AND CALDWELL ASSOCIATES

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MW-108-09	12/8/2009 *
Benzene	ND
Toluene	ND
Ethylbenzene	ND
o-Xylene	ND
m&p-Xylenes	ND
Naphthalene	ND

MW-109D-09	12/7/2009
Benzene	ND
Toluene	ND
Ethylbenzene	ND
o-Xylene	ND
m&p-Xylenes	ND
Naphthalene	ND

MW-109S09	12/7/2009
Benzene	ND
Toluene	ND
Ethylbenzene	ND
o-Xylene	0.3 J
m&p-Xylenes	0.71 J
Naphthalene	ND

MW-105-08	12/18/2008	4/28/2009	12/8/2009
Benzene	**4 J**	0.81 J	0.4 J
Toluene	0.4 J	ND	ND
Ethylbenzene	4 J	2.4 J	1.2 J
o-Xylene	**6 J**	2.5 J	1.2 J
m&p-Xylenes	1 J	0.52 J	ND
Naphthalene	**19**	**11**	1.3 J

MW-110-09	12/9/2009
Benzene	ND
Toluene	ND
Ethylbenzene	ND
o-Xylene	ND
m&p-Xylenes	ND
Naphthalene	ND

MW-103-05	7/6/2005	12/19/2008	4/27/2009 *	12/8/2009
Benzene	**2 J**	**3 J**	**1.8 J**	**4.8 J**
Toluene	0.95 J	0.3 J	ND	ND
Ethylbenzene	**91**	**8 J**	4.4 J	**12**
o-Xylene	**36**	3 J	2.1 J	4.8 J
m&p-Xylenes	**11**	0.5 J	0.37 J	0.59 J
Naphthalene	ND	**10 J**	3.1 J	5.7 J

MW-111-09	12/9/2009
Benzene	ND
Toluene	ND
Ethylbenzene	ND
o-Xylene	ND
m&p-Xylenes	ND
Naphthalene	ND

MW-102-05	7/6/2005	12/18/2008	4/28/2009	12/9/2009
Benzene	NS	NS	**630**	**540**
Toluene	NS	NS	**58**	**39**
Ethylbenzene	NS	NS	**720**	**660**
o-Xylene	NS	NS	**270**	**230**
m&p-Xylenes	NS	NS	**360**	**340**
Naphthalene	NS	NS	**2500**	**2400**

MW-104-08	12/18/2008 *	4/27/2009	12/8/2009
Benzene	ND	0.95 J	ND
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
o-Xylene	ND	ND	ND
m&p-Xylenes	ND	ND	ND
Naphthalene	ND	ND	ND

MW-107-08	12/19/2008	4/28/2009	12/9/2009
Benzene	**89**	**9.7 J**	**9.3 J**
Toluene	**6 J**	1.1 J	ND
Ethylbenzene	**300**	**41**	**40**
o-Xylene	**97**	**16**	**12**
m&p-Xylenes	**120**	**19**	**14**
Naphthalene	**850**	**260**	**190**

MW-101-05	7/6/2005 *	12/18/2008	4/27/2009	12/9/2009
Benzene	ND	0.6 J	0.36 J	ND
Toluene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND
m&p-Xylenes	ND	ND	ND	ND
Naphthalene	ND	1 J	ND	ND

HUYCK STREET

HUYCK SQUARE

WASHINGTON STREET

ACADEMY STREET

MW-106S-08

MW-106D-08

RETORT HOUSE

GAS HOLDER

COAL SHED

PURIFIER & CONDENSER ROOMS

GAS HOLDER

METER ROOM

N

Legend

- Monitoring well where constituent concentrations are below Class GA Criteria
- Monitoring well where one or more constituent concentrations are above Class GA Criteria
- Monitoring well not sampled due to NAPL presence
- Ground Surface Elevation Contour (ft., NGVD)
- Property Line
- Pavement Edge
- Water
- Former MGP Structure Location.

Explanation of terms and abbreviations:
BTEX - Benzene, Tolune, Ethylbenzene, Xylenes
Bold Value - Indicates constituent concentration at or above Class GA Criteria
ND - Not Detected
NS - Not Sampled
J - Estimated concentration
* - Table lists the highest concentration from original and duplicate sample

Results reported in micrograms per liter (µg/L)

0 25 50 100 Feet

FIGURE 10
BTEX AND NAPHTHALENE CONCENTRATIONS IN GROUNDWATER

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 03/15/10

PROJECT NUMBER 136501.106

BROWN AND CALDWELL ASSOCIATES

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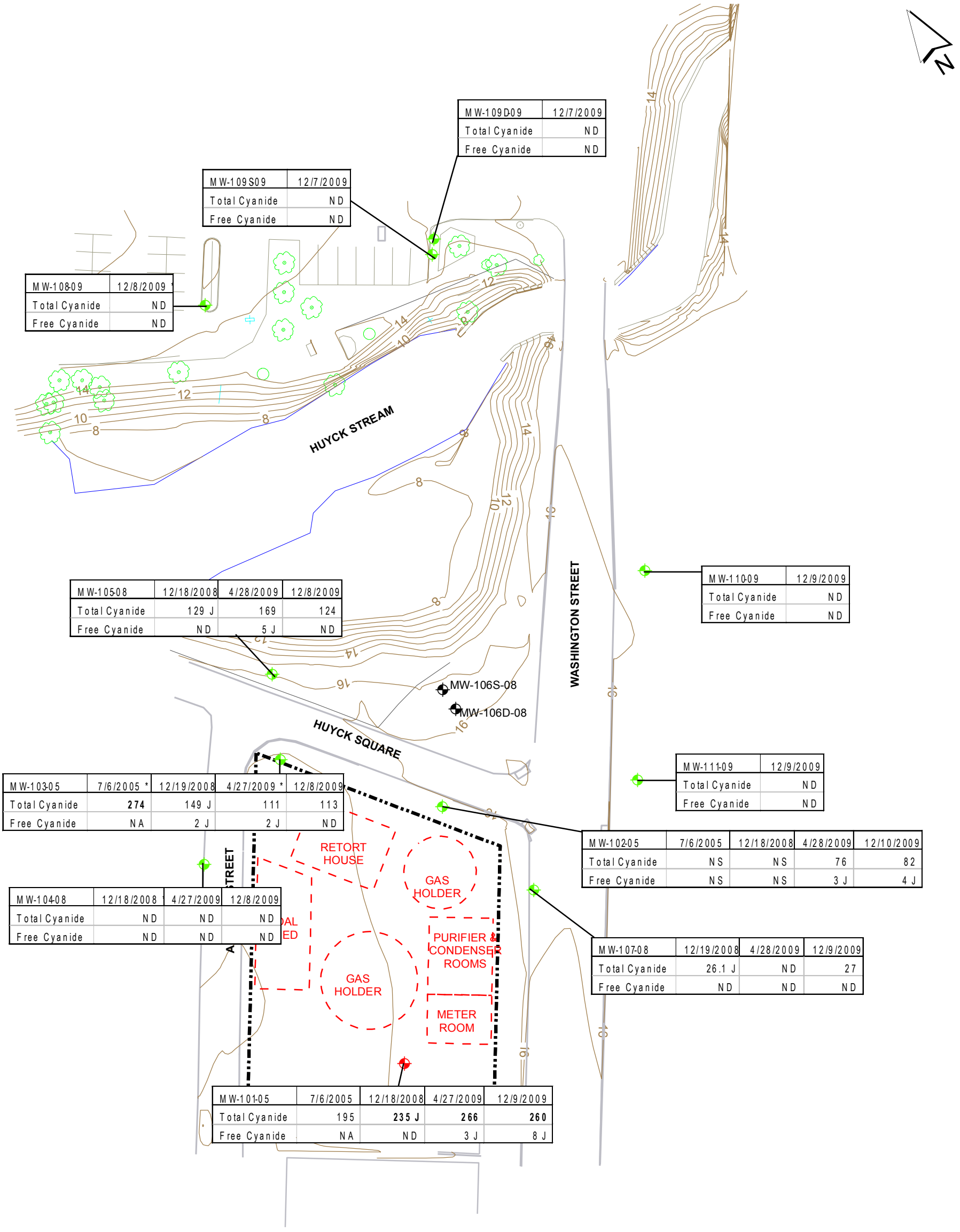

Legend

- Monitoring well where total cyanide concentration is below Class GA Criterion
- Monitoring well where total cyanide concentration is above Class GA Criterion
- Monitoring well not sampled due to NAPL presence
- Ground Surface Elevation Contour (ft., NGVD)
- Property Line
- Pavement Edge
- Water
- Former MGP Structure Location.

Explanation of terms and abbreviations:
Bold Value - Indicates constituent concentration above Class GA Criterion
ND - Not Detected
NS - Not Sampled
NA - Not Analyzed
J - Estimated concentration
* - Table lists the highest concentration from original and duplicate sample

Results reported in micrograms per liter (µg/L)

0 25 50 100 Feet

FIGURE 11
CYANIDE CONCENTRATIONS IN GROUNDWATER

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 03/16/10
PROJECT NUMBER 136501.106

BROWN AND CALDWELL ASSOCIATES

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APPENDIX A

Soil Boring and Monitoring Well Logs

BORING LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Boring No.** B-113-09 **Page** 1 **of** 1

Geologist/Office	**Checked By:**	**Borehole Diameter:**	**Screen Diameter and Type:**	**Slot Size:**	**Total Boring Depth (ft)**
THC/Albany NY	JLM	3"	NA	N/A"	11.0 ft.

Start/Finish Date	**Drilling Contractor:**	**Sampling:** Continuous Core	**Development Method:**
11/18/09 - 11/18/09	ADT	**Hammer Type:** N/A	N/A

Driller:	**Drilling Method:**	**Drilling Equipment:**	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695343.0 ft.
Martin Bachner	Direct Push	Jack Hammer/Macrocore	**Vert Datum:** NGVD 1929 **Northing:** 1387760.2 ft. **Ground Surface Elev:** 7.1 ft. **TOC Elev:** N/A ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Backfill	Readings (ppm)	Remarks
		CL ML	**Silt and Sand** Dark grey Clayey SILT, trace (+) Organics, trace (-) f Sand. Moist.							3.1	*0.0-11.0' - Borehole backfilled with bentonite chips*
	5										
		CL ML	Same as above. Wet.							451	
5		CL ML	Dark grey Clayey SILT, little (-) mf Sand. Wet.								5.2-5.8' - Slight odor. 5.8-7.8' - Strong tar-like odor
	0	SP	**Sand and Gravel**								
		GP SP	Black stained cmf SAND and cm GRAVEL (brick), little (-) Clayey Silt. Red brick.								7.1-7.8' - Blebs of red-black NAPL.
		GP SP	Dark grey cmf SAND and mf GRAVEL, trace (+) Clayey Silt.							384	7.8-8.0' - Saturated with groundwater and red-brown NAPL, strong tar-like odor.
10		GP	Same as above. Saturated								8.0-9.3' - Strong tar-like odor
		SP GP	Grey mf SAND and mf GRAVEL (rounded to sub-angular), little (+) Clayey Silt.								
		SP GP	Light brown-grey mf SAND and mf GRAVEL (flat), little (+) Clayey Silt.								

BORING LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Boring No.** B-114-09 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
THC/Albany NY	JLM	3"	NA	N/A"	15.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Continuous Core	Development Method:
11/18/09 - 11/18/09	ADT	Hammer Type: N/A	N/A

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695421.1 ft.
Martin Bachner	Direct Push	Jack Hammer/Macrocore	Vert Datum: NGVD 1929 Northing: 1387748.8 ft. Ground Surface Elev: 7.3 ft. TOC Elev: N/A ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Backfill	Readings (ppm)	Remarks
		CL ML	**Silt and Sand** Dark grey-black Clayey SILT, trace (+) Organics.				1.3	*0.0-15.0' - Borehole backfilled with bentonite chips.*
	5	CL ML	Dark grey-black Clayey SILT, trace (+) Organics, trace (-) m Gravel.					
		CL ML	Dark grey-black Clayey SILT, little (+) mf Sand, trace (+) mf Gravel.				85.4	
5		CL ML	Same as above.					
	0	GP	**Sand and Gravel** Black mf GRAVEL, little (+) mf Sand, trace Silt.					6.5-7.2' - Sheen present, tar-like odor.
		GP	Same as above. Saturated.				399	
		GP	Black weathered SHALE.					8.8-9.6' - Strong tar-like odor.
10		SP GP	Black mf SAND and mf GRAVEL, little (-) Silt.					9.6-9.8' - Brown NAPL blebs found throughout, strong tar-like odor.
	-5	SP	Same as above. Saturated.				374	12.0-12.7' - Brown NAPL blebs found throughout, strong tar-like odor.
		GP SP	Grey-light brown f SAND, trace Silt. Well sorted. Saturated.					
		SP	Grey-brown f SAND, little (+) cm Gravel (subangular), little (+) Clayey Silt.					
15								

BORING LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Boring No.** B-115-09 **Page** 1 **of** 1

Geologist/Office	**Checked By:**	**Borehole Diameter:**	**Screen Diameter and Type:**	**Slot Size:**	**Total Boring Depth (ft)**
CRM/Albany NY	JLM	8.25"	NA	N/A"	24.7 ft.

Start/Finish Date	**Drilling Contractor:**	**Sampling:** Split Spoon	**Development Method:**
11/11/09 - 11/11/09	ADT	**Hammer Type:** 140 lbs	N/A

Driller:	**Drilling Method:**	**Drilling Equipment:**	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695472.3 ft.
Ritchie Comfort	HSA	CME 55 Track	**Vert Datum:** NGVD 1929 **Northing:** 1387621.3 ft. **Ground Surface Elev:** 16.0 ft. **TOC Elev:** N/A ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Backfill	Readings (ppm)	Remarks
	15	SP	**Fill** Topsoil. Brown mf SAND, little Silt, little (-) Organics. Moist.	2-3-4-4						0.0	*0.0-24.7' - Borehole backfilled with cement/ bentonite grout.*
		SP	Black-brown cmf SAND, little (-) Silt. Cinders.	3-4-4-4						0.0	
		SP	Same as above.								
		SM	Grey-white cmf SAND, little mf Gravel. Predominately ash. Dry.	3-2-2-4						0.0	
5		ML									
	10	SP	Brown mf SAND, some Silt. Moist.								
		SP	Grey cmf SAND, little mf Gravel. Ash and cinders. Moist.	3-3-3-3						0.0	
		SP	Same as above.								
		SM	Brown cmf SAND, little (+) mf Gravel. Loose. Dry.	2-3-2-1						0.0	
		ML									
		SM	Same as above.								
		ML	**Silt and Sand**								
10		SP	Brown SILT, some (-) f Sand. Stiff. Moist.	1-1-1-1						0.3	10.2-11.3' - Scattered sheen on water, slight tar-like odor.
	5	SP	Grey SILT, some (-) f Sand. More moist and plastic than overlying.								
		ML									
		SM	No recovery.	1-1-1-1						0.0	
		ML	Brown mf SAND, little Silt. Stiff. Moist.								
		SM	Black cmf SAND, little (+) mf Gravel, trace Silt. Saturated.	4-1-1-4						0.0	
15		ML	Grey SILT, little f Sand. Very plastic.								
	0		Grey SILT, some mf Sand, trace f Gravel.								
		SP	Soft. Saturated.	3-2-2-2						0.0	16.0-16.9' - Faint tar-like odor.
			Same as above.								
			Dark grey cmf SAND, little Silt, little (-) mf Gravel. Stiffer than overlying.								
		SP		5-6-7-11						0.0	
		GP	**Glacial Till**								
			Brown cmf SAND, some mf Gravel, little Silt. Wet.								
20		SP	Same as above, abundant shale fragments.	7-20-16-14						0.0	
	-5	GP	Saturated.								
		SP	Same as above. Very stiff. Moist.	17-23-23-36						0.0	
		GP									
		SP	Grey-green mf GRAVEL, some cmf Sand, little (+) Silt. Very dense and stiff.	45-50/2"						0.0	
		GP									
			Bedrock Weathered shale bedrock. Heavily fractured.								Split spoon and auger refusal at 24.7'.

BORING LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Boring No.** B-116-09 **Page** 1 **of** 1

Geologist/Office	**Checked By:**	**Borehole Diameter:**	**Screen Diameter and Type:**	**Slot Size:**	**Total Boring Depth (ft)**
CRM/Albany NY	JLM	8.25"	NA	N/A"	16.9 ft.

Start/Finish Date	**Drilling Contractor:**	**Sampling:** Split Spoon	**Development Method:**
11/10/09 - 11/10/09	ADT	**Hammer Type:** 140 lbs	N/A

Driller:	**Drilling Method:**	**Drilling Equipment:**	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695415.9 ft.
Ritchie Comfort	HSA	CME 75 184	**Vert Datum:** NGVD 1929 **Northing:** 1387541.4 ft. **Ground Surface Elev:** 16.4 ft. **TOC Elev:** N/A ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Backfill	Readings (ppm)	Remarks
		SP	**Fill** Topsoil. Brown mf SAND, litle (+) Silt,	1-1-1-1						0.0	*0.0-16.9' - Borehole backfilled with cement/ bentonite grout.*
	15	SP	little (-) Organics. Moist.								
		SP	Black mf SAND, little f Gravel. Ash and	2-2-3-3						0.0	
		SP	cinder. Moist.								
			Brown mf SAND, trace (+) Silt.								
		SP	Same as above. Moist.	2-2-2-2						0.0	
5			Brown mf SAND, little (+) Silt, trace Organics. Moist.								
	10	SP	Same as above.	3-3-4-5						0.0	
		SM	**Sand and Silt**								
		ML	Brown mf SAND, some Silt. Wet.	1-2-3-5						0.0	
		SM	Same as above. Saturated and plastic.								
		ML	Brown mf SAND, some Silt, little mf								
10		SM	Gravel. Saturated. Gravel increases near	2-3-2-2						0.0	
		ML	base.								
	5	SP	Brown cmf SAND, little (+) mf Gravel,								10.9-11.4' - Scattered sheen and trace NAPL blebs, tar-like odor.
		SP	little (-) Silt. Saturated.								
		SP	Greenish-grey-brown cmf SAND, little (-)	2-2-2-6						3.1	12.0-12.9' - Scattered sheen on grains, tar-like odor.
			mf Gravel, little Silt. Loose, saturated.								
			Same as above.								
		SP	**Glacial Till**	5-5-14-41						0.0	13.2-13.6' - Soils partially saturated in red-black NAPL, tar-like odor.
15			Brown cmf SAND, little (+) mf Gravel, little (-) Silt. Tight.								
	0		**Bedrock**	41-50/4"						0.0	
			Weathered shale bedrock. Heavily fractured, grey clay filling fractures. Same as above.								Split spoon refusal at 16.9'.

BORING LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Boring No.** B-117-09 **Page** 1 **of** 1

Geologist/Office	**Checked By:**	**Borehole Diameter:**	**Screen Diameter and Type:**	**Slot Size:**	**Total Boring Depth (ft)**
CRM/Albany NY	JLM	8.25"	NA	N/A"	16.1 ft.

Start/Finish Date	**Drilling Contractor:**	**Sampling:** Split Spoon	**Development Method:**
11/11/09 - 11/12/09	ADT	**Hammer Type:** 140 lbs	N/A

Driller:	**Drilling Method:**	**Drilling Equipment:**	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695383.0 ft. **Vert Datum:** NGVD 1929 **Northing:** 1387497.6 ft. **Ground Surface Elev:** 16.5 ft. **TOC Elev:** N/A ft.
Ritchie Comfort	HSA	CME 55 Track	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Backfill	Readings (ppm)	Remarks
		SP	**Fill** TopSoil. Brown mf SAND, little (+) Silt, trace f Gravel, little Organics. Moist.	H-3-2-3						0.0	*0.0-16.1' - Borehole backfilled with cement/ bentonite grout.*
	15	SP	Same as above.	3-5-5-5						0.0	
		ML	Brown-Grey Clayey SILT, little f Sand. Stiff. Moist.								
		SP	Brown mf SAND, little (+) Silt, trace Organics, trace mf Gravel. Moist.	2-2-3-3						0.0	
5											
	10	SP	Same as above.	3-3-3-2						0.0	
		SP GP	Brown cmf SAND, some (-) mf Gravel, little Silt. Moist to wet. Color change to bluish-grey in shoe.	4-5-4-5						0.0	
10		SP	**Glacial Till** Brown cmf SAND, little (+) mf Gravel, little Silt. Dense. Moist.	6-7-15-32						0.0	
	5	SP GP	Light grey cmf GRAVEL and cmf SAND. Dense. Dry.	50-50/4"						0.0	
			No recovery.	50-50/1"						0.0	
15											
			Bedrock Weathered dark grey shale bedrock. Heavily fractured and mechanically fragmented.	50/1"						0.0	Split Spoon Refusal at 16.1'

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** **MW-108-09** **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
TMJ/Albany NY	JLM	8.25"	2" PVC	0.02"	35.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Split Spoon	Development Method:
11/17/09 - 11/18/09	ADT	**Hammer Type:** 140 lbs	Surged and Purged with Whale Pump

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695396.1 ft.
Ritchie Comfort	HSA	CME 75 184	Vert Datum: NGVD 1929 Northing: 1387895.6 ft. Ground Surface Elev: 15.7 ft. TOC Elev: 15.5 ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	Readings (ppm)	Remarks
	15	SP	**Fill**	H-1-2-1			1.5	*0-0.5' - Concrete pad.*
		SM	Brown mf SAND, little Silt.					
			Dark brown f SAND, some Silt, little mf					
		SP	Gravel. Misc fill: Brick and coal fragments.	2-3-3-4			1	
		SP	Dark brown f SAND, little Silt.					
			Brown f SAND, little Silt, little (-) mf					*0.5-5' - Bentonite Seal.*
		SP	Gravel. Damp.	1-2-2-3			1.3	
5		SM	Same as above.					
	10	ML	**Sand and Silt**					
		SM	Brown f SAND and SILT. Damp	2-1-2-1			1.8	
		ML	Same as above.					
		SM	Brown-tan Clayey SILT, some f Sand. Very	1-1-H-H			1.6	
		ML	soft. Moist.					
10								
	5	SM	Brown-tan f SAND, some (+) Silt & Clay,	H-H-H-H			1.4	
			little mf Gravel. Moist.					*5-17' - #1 Filter Sand.*
		SM	Brown-tan f SAND & Clayey SILT. Moist.	1-2-2-1			1.1	*7-17' - 0.020" Slotted PVC Screen.*
		ML						
		SM	Brown-grey f SAND & Clayey SILT, little	3-1-1-3			1.8	
15		ML	mf Gravel.					
	0	SC	Brown-grey Silty CLAY, some (+) f Sand.					
		CL	Moist.	2-3-3-4			NA	
		SC	Brown Silty CLAY, some (+) f Sand.					
		CL	Grey-brown CLAY & SILT, little f Sand.					
		CL	Grey f SAND, some Clayey Silt.	1-H-1-1			5.1	
		ML	Grey f SAND and Silty CLAY.					
		SM	Grey mf SAND, some Silt, little Organics.					
20		SC	Moist.	H-H-H-2			1.9	
	-5	CL	Same as above.					
		SM						
		SM	Grey mf SAND, little Silt, little Organics.	H-H-2-3			NA	
		SP	Grey mf SAND, some Silt. Large piece of					
		SM	wood from 23.1-23.4'.					
		SP	Grey cmf SAND, trace Silt. Saturated.	1-1-1-1			1.6	
		SM	Grey mf SAND, some Silt.					
25		SP	Grey cmf SAND, little Silt.					*17-35' - Bentonite Backfill*
	-10	SM	Grey mf SAND, some Silt. Saturated.	1-1-3-1			1.5	
		SP	Grey cmf SAND, little mf Gravel					
		SM	(subangular to subrounded), little Silt.					
		SM	**Sand and Gravel**					
		SM	Grey f SAND & SILT. Saturated.	1-1-2-2			1.4	
		SP	Grey f SAND, some (+) Silt.					
		GP	Grey cmf SAND, some f Gravel					
30	-15	SM	(Subrounded to angular), little Silt.	5-2-1-1			NA	

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** MW-108-09 **Page** 2 **of** 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well	Readings (ppm)	Remarks
		SM	Grey f SAND, some (+) Silt.								
		SP	Grey f SAND, some Silt, little Organics (wood).	5-2-1-1						1.6	
			Grey cmf SAND, little Silt.								
		SP	**Weathered Till**								
		GP	Grey cmf SAND, some mf Gravel	1-50/1"						NA	
35	-20	SP	(Weathered Shale, subangular, flat), little (-) Silt.								Auger refusal at 35'
			Grey cmf SAND, little Silt.								
			Bedrock								
			Grey Shale bedrock.								

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** MW-109S-09 **Page** 1 **of** 1

Geologist/Office	**Checked By:**	**Borehole Diameter:**	**Screen Diameter and Type:**	**Slot Size:**	**Total Boring Depth (ft)**
TMJ/Albany NY	JLM	8.25"	2" PVC	0.02"	17.0 ft.

Start/Finish Date	**Drilling Contractor:**	**Sampling:** Split Spoon	**Development Method:**
11/19/09 - 11/19/09	ADT	**Hammer Type:** 140 lbs	Surged and Evacuated with disposable Bailer

Driller:	**Drilling Method:**	**Drilling Equipment:**	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695502.3 ft. **Vert Datum:** NGVD 1929 **Northing:** 1387856.0 ft. **Ground Surface Elev:** 15.6 ft. **TOC Elev:** 15.3 ft.
Ritchie Comfort	HSA	CME 75 184	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well (Traffic Rated Vault Box)	Readings (ppm)	Remarks
5	15		Refer to MW-109D-09 soil boring log for description of soils.								*0-0.5' - Concrete pad.*
	10										*2-5' - Bentonite Seal.*
10	5										*5-17' - #1 Filter Sand.*
											7-17' - 0.020" Slotted PVC Screen.
15	0										

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** MW-109D-09 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
TMJ/Albany NY	JLM	8.25"	2" PVC	0.02"	38.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Split Spoon	Development Method:
11/18/09 - 11/19/09	ADT	**Hammer Type:** 140 lbs	Surged and Purged with Whale Pump

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695507.2 ft.
Ritchie Comfort	HSA	CME 75 184	Vert Datum: NGVD 1929 Northing: 1387862.1 ft. Ground Surface Elev: 15.5 ft. TOC Elev: 15.4 ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	Readings (ppm)	Remarks
	15	SP	**Fill**	1-1-6-5			1.5	*0-0.5' - Concrete pad.*
		GP	Dark brown mf SAND, some (+) mf Gravel (pieces of coal and brick), little Silt.					
		SP	Same as above.	3-3-3-4			1.4	
		GP	Brown f SAND, some Silt.					
		SM						
		ML	Same as above.	3-2-3-4			1.4	
5		SM	Black mf GRAVEL (coal).					
	10	ML						
			Sand and Silt					
		GW	Brown-grey mf SAND, some (+) Silt.	2-2-3-3			1.1	
		SM	Moist.					
		ML	Gray f SAND, some (+) Silt. Moist.					
		SM						
		ML	Gray SILT and f SAND. Moist.	1-1/ft-1			1.2	
		SM						
		ML						
10	5	SM	Same as above.	H-H-H-1			1.4	*0.5-23' - Cement/Bentonite Grout.*
		ML						
		SM	Grey-brown mf SAND, some Silt.					
		ML	Same as above.	1-2-2-3			0.9	
		SM						
		ML	Brown Clayey SILT, some f Sand. Moist.					
		SM	Brown-tan Clayey SILT, some f Sand. Stiff.	H-1-2-3			1.8	
15	0	ML						
		SM						
		ML	Same as above.	4-4-4-4			1.5	
		SM	Grey Silty CLAY, little (+) f Sand.					
		ML						
		SP						
		SM	Grey Clayey SILT, some (+) f Sand.	1-1-2-2			1.6	
		ML	Grey f SAND, some (+) Clayey SILT.					
20	-5	SM	Grey mf SAND, some Silt, trace Organics (roots). Moist.	1-1-2-2			1.5	
		ML						
		SM	Grey mf SAND, some Silt, some Organics					
		ML	Grey mf SAND, little Silt, little Organics. Wet.	H-1-4-3			1.3	
		SM	Grey cmf SAND, little (-) Silt.					
		ML						
		SP	Grey mf SAND, little (-) Silt. Saturated.	1-1-3-3			2	*23-25' - Bentonite Seal.*
		SP	Same as above.					
25	-10	SP	Grey f SAND and Clayey SILT. Wet.					
		SP						
		SM	Grey mf SAND, some Clayey Silt.	3-3-3-4			1.8	
		ML						
		SM	Grey cmf SAND, little Silt.					
		ML	Grey SILT and f SAND.					
		SP	Grey mf SAND, some Organics, little Silt. Wet.	H-H-1-1			1.7	
		SM						
30		ML						
	-15	SP	Same as above.	3-2-2-1			1.4	

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** **MW-109D-09** **Page** 2 **of** 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well	Readings (ppm)	Remarks
		SP	**Sand and Gravel**								
		SP	Grey cmf GRAVEL, some mf Sand, little Silt.	3-3-4-5						1.8	*25-38' - #1 Filter Sand.*
		GP									
		SM	Grey f SAND and SILT.								*28-38' - 0.020" Slotted PVC Screen.*
		ML	Grey mf SAND, little Silt.	3-4-4-4						1.7	
		SP									
35	-20		**Weathered Till**								
		GP	Grey cmf GRAVEL (sub-angular to sub-rounded), little (-) Silt.								
		SP									
		GP	Grey cmf GRAVEL (weathered Shale), some mf Sand, some Silt.	4-7-8-50/1"						1.6	
		SP									
		GP	Grey cmf SAND, some (+) cmf Gravel (sub-rounded), little Silt.								Split-spoon refusal at 37.7'
			Bedrock								Auger refusal at 38'

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** **MW-110-09** **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
TMJ/Albany NY	JLM	8.25"	2" PVC	0.02"	25.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Split Spoon	Development Method:
11/16/09 - 11/17/09	ADT	**Hammer Type:** 140 lbs	Surged and Purged with Whale Pump

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695505.2 ft.
Ritchie Comfort	HSA	CME 75 184	Vert Datum: NGVD 1929 Northing: 1387670.3 ft. Ground Surface Elev: 16.4 ft. TOC Elev: 16.1 ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	Readings (ppm)	Remarks
		SP	**Fill**	H-1-3-2			10.2	*0-0.5' - Concrete pad.*
	15	SP	Brown f SAND, little Silt.					
		SM	Dark Brown f SAND, some Silt, trace					
		CL	Organics, trace misc fill (pieces of coal).	4-3-3-4			0.4	
		ML	Light brown Clayey SILT, little f Sand, trace					
		CL	mf Gravel.					
		ML	Brown Clayey SILT, little (+) mf Gravel	2-2-3-4			1.5	*2-5' - Bentonite Seal.*
		CL	(misc fill: pieces of brick, coal), trace f Sand.					
5		ML	Damp.					
			Light brown-grey SILT & CLAY, layered.					
	10	CL	Wet.	2-2-2-3			0.7	
		ML	Light brown-grey SILT & CLAY, trace f					
			Gravel (pieces of coal). Wet.					
		CL	**Silt and Sand**	2-2-3-3			1.0	
		ML	Light brown SILT & CLAY.					
		CL	Light brown Clayey SILT, little mf Sand.					
10		ML	SILT & CLAY, trace mf Sand. Stiff. Wet.	1-1-2-2			0.6	
	5	CL	Brown Silty CLAY/Clayey SILT, little mf					*5-17' - #1 Filter Sand.*
		ML	SAND.					
		CL	Grey Clayey SILT, trace f Sand.	H-1-1-1			0.0	*7-17' - 0.020" Slotted PVC Screen.*
		ML	Brown-green Clayey SILT/SILT, trace f					
		CL	Sand.					
		ML	Grey SILT & f SAND.	H-1-2-4			1.8	
		CL	Same as above.					
15		ML	Grey mf SAND, little Silt, trace Organics					
	0	SM	(wood fragments).	1-1-1-2			4.2	
		ML	Grey cmf SAND, some mf Gravel, little					
		SM	Silt.					
		ML	Grey mf SAND, some Silt, little Organics					
		SP	(wood fragments, root matter). Wet.	H-1-3-1			92	
		SP	Grey mf SAND, little Silt.					
		GP						
20		SM	Grey cmf SAND, little (+) mf Gravel, little					
		ML	Silt.	H-1-2-1			0.2	
	-5	SP	Grey SILT & f SAND.					*17-25.5' - Bentonite Backfill*
		SP	Grey SILT & f SAND, little (+) Clayey Silt,	2-15-28-43			1.3	
		SM	little (-) mf Gravel.					
		ML	**Glacial Till**					
		SM	Brown mf SAND, some Clayey Silt, little	50/4"			0.0	
		ML	(+) mf Gravel. Wet.					
25		SM	Same as above. Denser than overlying.					
		ML	Grading to:					
			Bedrock	50/1"			0.0	Auger refusal at 25.5'
		SM	Grey f GRAVEL (subrounded to angular),					
		ML	some c Sand, little (+) Silt.					
		SP	Same as above. Grey bedrock fragments.					
		GP	No recovery.					
		SP						
		GP						

MONITORING WELL LOG

BROWN AND CALDWELL	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 136501.106 **Project Location:** Rensselaer, NY	**Permit Number:** N/A	**Well No.** MW-111-09 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
CRM/Albany NY	JLM	8.25"	2" PVC	0.02"	20.3 ft.

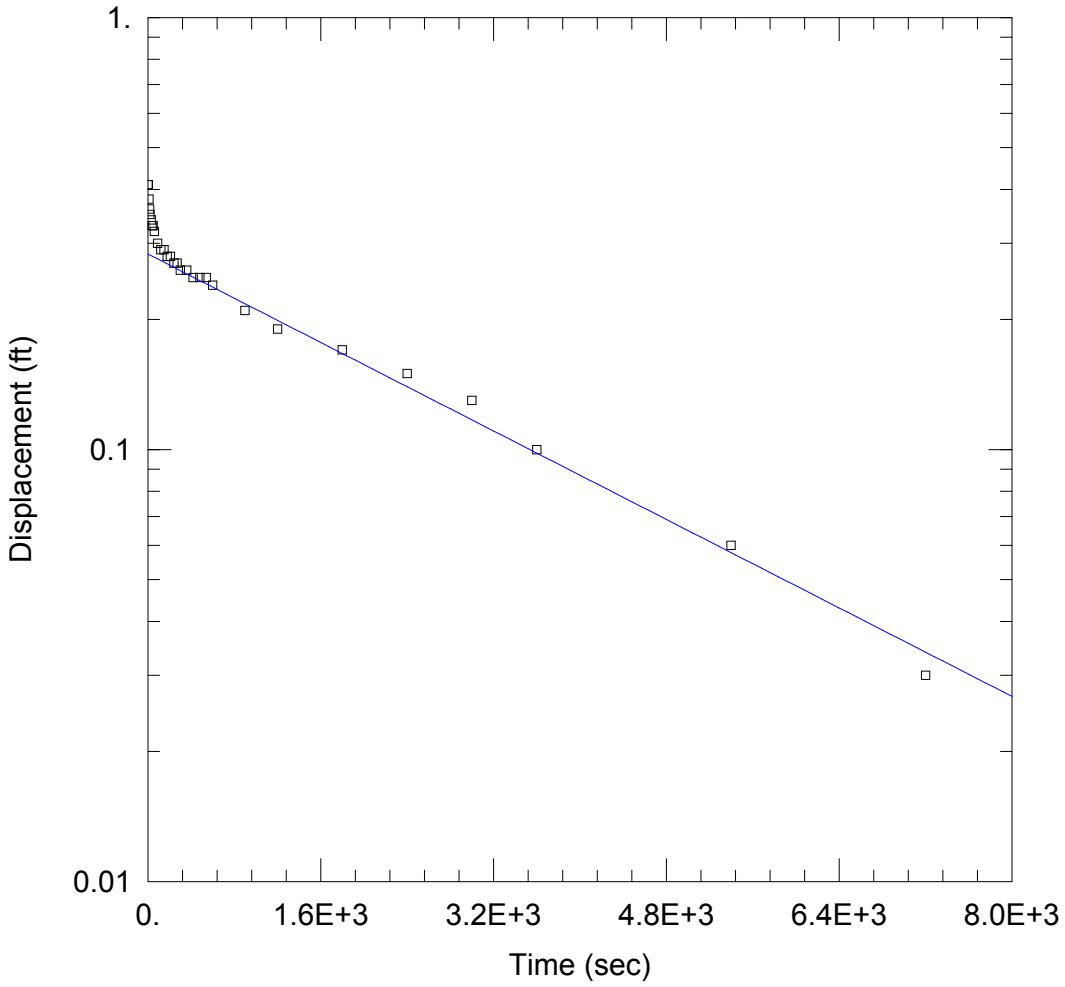
Start/Finish Date	Drilling Contractor:	Sampling: Split Spoon	Development Method:
11/12/09 - 11/12/09	ADT	Hammer Type: 140 lbs	Surged and Purged with Whale Pump

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695446.7 ft. Vert Datum: NGVD 1929 Northing: 1387586.6 ft. Ground Surface Elev: 16.3 ft. TOC Elev: 16.1 ft.
Ritchie Comfort	HSA	CME 75 184	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	Readings (ppm)	Remarks
		SM	**Fill**	1-5-7-9			0.0	*0-0.5' - Concrete pad.*
	15	ML	Topsoil. Brown mf SAND, some Silt, little Organics. Moist.					
		SP						
		SP	Brown-black cmf SAND, little mf Gravel (misc fill: brick fragments), little (-) Silt. Moist.	3-2-1-2			0.0	*0.5-3.5' - Bentonite Seal.*
		SP	Same as above. Some concrete and cinder fragments. Moist.	1-1-1-1			0.0	
5			Brown-black mf SAND, little Silt, little (-) f Gravel (concrete fragments). Moist.					
	10	SP	Black cmf SAND, little f Gravel (cinders), trace Silt. Saturated.	1-1-1-1			0.0	
		SP	Same as above. Loose. Saturated.	1-1 ft-1			0.0	
								3.5-15' - #1 Filter Sand.
10		SP	Grey-black cmf SAND, little (+) Silt, little mf Gravel. Soft. Saturated.	H-H-H-1			0.0	*5-15' - 0.020" Slotted PVC Screen.*
	5	OH	**Sand and Silt**					10.0-10.6' - Sheen on water in spoon, trace red-brown-black NAPL blebs, slight tar-like odor.
		OH	Grey-black Clayey SILT, some (+) Organics (wood and wood fiber), little f Sand. Soft and plastic. Saturated.	2-1-2-2			1.6	
		OH	No recovery.	2-5-6-10			0.0	10.6-11.2' - Slight tar-like odor.
15		SM ML	Black-grey ORGANICS (wood and wood fibers), some Clayey Silt. Saturated.					14.0-14.3' - Occasional sheen on water. Slight tar-like odor.
	0		**Glacial Till**					*15-16' - 1' PVC sump with bentonite in annular space between borehole and sump.*
		SM ML	Brown-grey mf SAND, some (-) Silt, little mf Gravel. Dense and tight.	10-17-19-30			0.0	
		SM ML	Same as above. Brown. Very dense and tight. No recovery.	50/1"			0.0	Split spoon refusal at 18'
								16-20.3' - Bentonite backfill.
20		SM ML	**Bedrock** Pulverized shale in shoe.	50/1"			0.0	Auger refusal at 20.3'

APPENDIX B

In-Situ Hydraulic Conductivity Plots



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\RI\Slug_Tests\MW-108.aqt
Date: 03/25/10 Time: 15:22:11

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Gird
Location: Rensselaer NY
Test Well: MW-108
Test Date: 3/16/2010

AQUIFER DATA

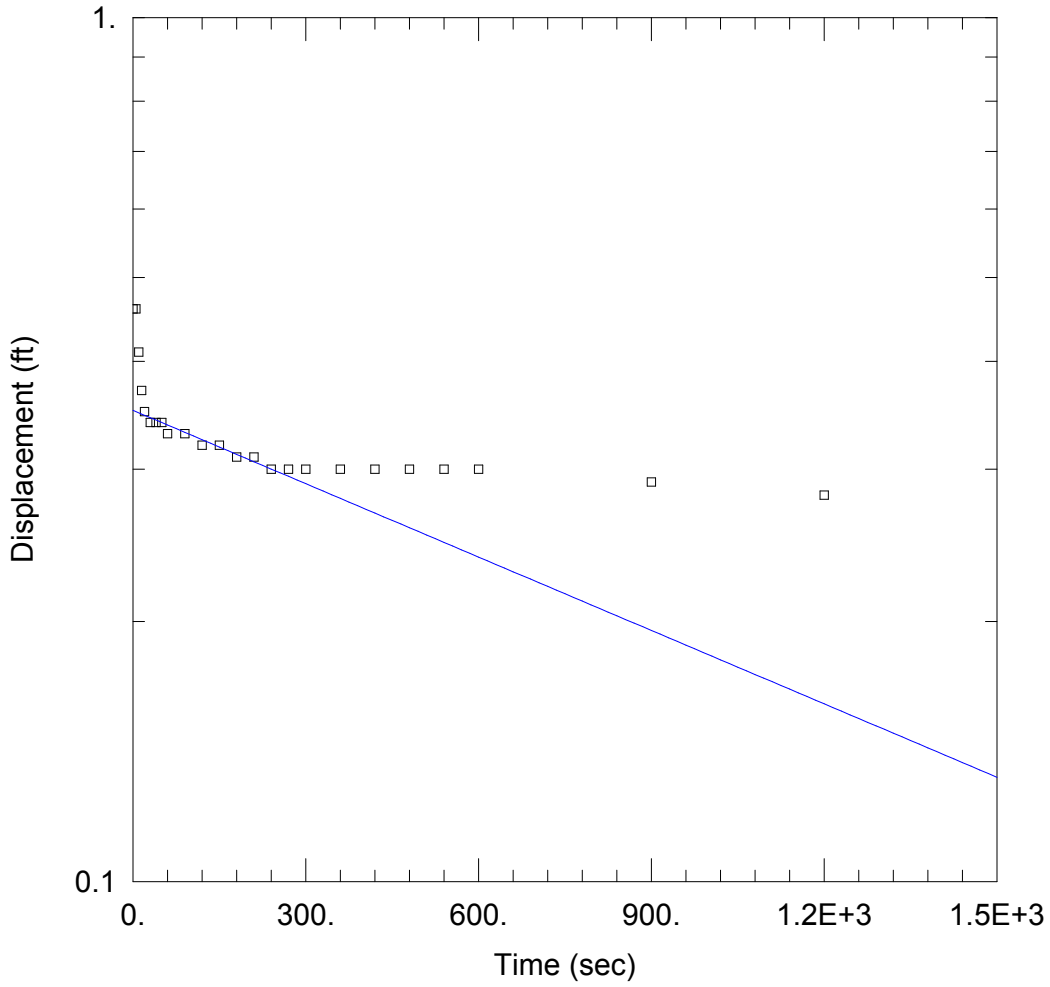
Saturated Thickness: 26.85 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-108)

Initial Displacement: 0.41 ft
Total Well Penetration Depth: 9.45 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.45 ft
Screen Length: 9.45 ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.097E-5 cm/sec
y0 = 0.2835 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\RI\Slug_Tests\MW-109S.aqt
Date: 03/26/10 Time: 11:40:53

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Gird
Location: Rensselaer NY
Test Well: MW-109S
Test Date: 3/16/2010

AQUIFER DATA

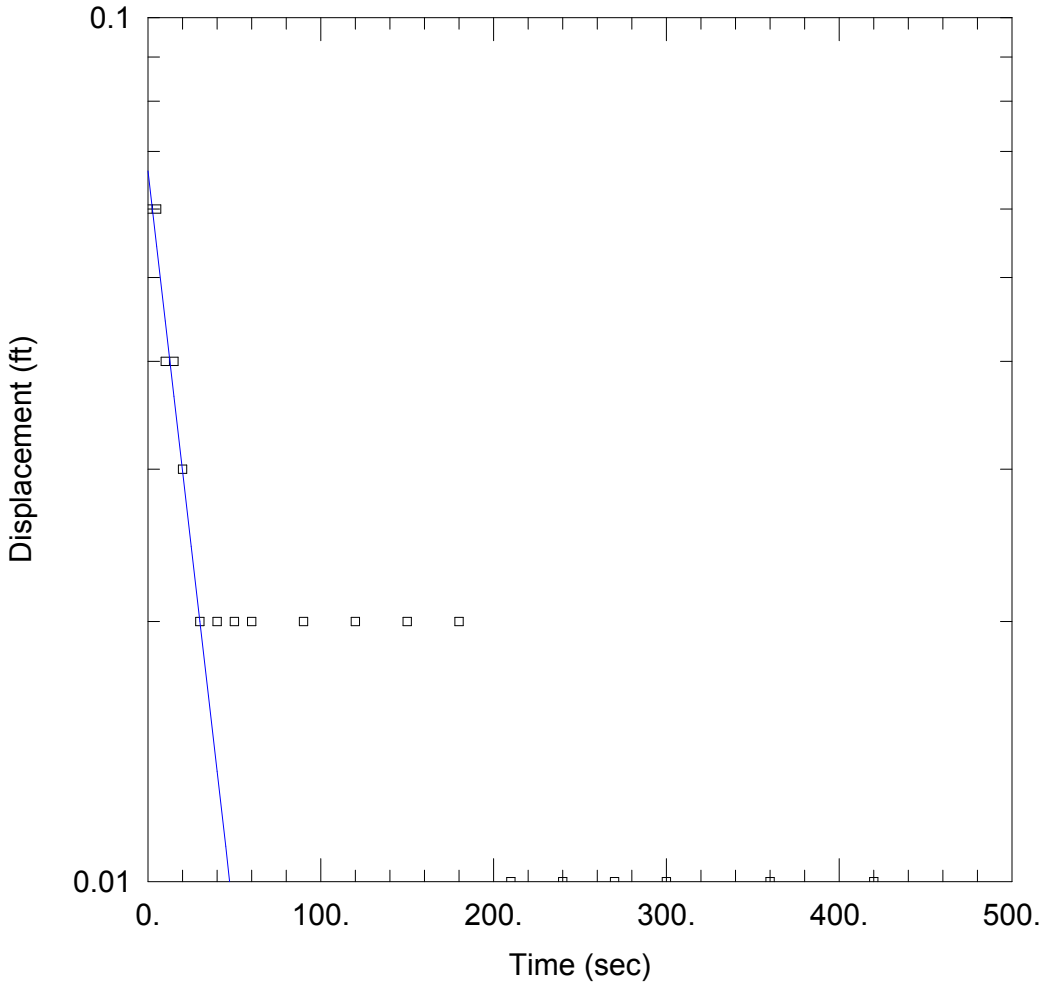
Saturated Thickness: 31.21 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-109S)

Initial Displacement: 0.46 ft
Total Well Penetration Depth: 10.51 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 10.51 ft
Screen Length: 10. ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 2.331E-5 cm/sec
y0 = 0.351 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\RI\Slug_Tests\MW-109D.aqt
Date: 03/25/10 Time: 15:21:47

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Gird
Location: Rensselaer NY
Test Well: MW-109D
Test Date: 3/16/2010

AQUIFER DATA

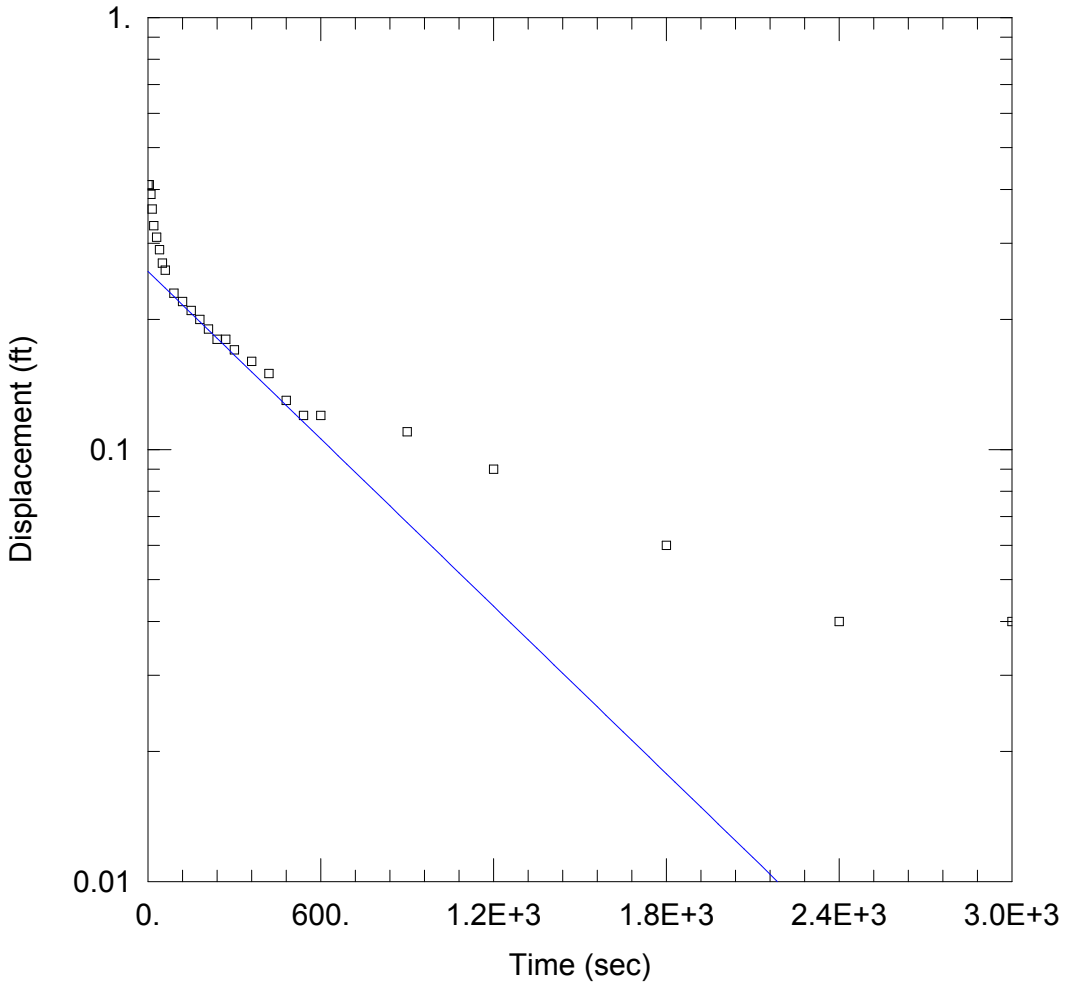
Saturated Thickness: 31.32 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-109D)

Initial Displacement: 0.06 ft
Total Well Penetration Depth: 31.32 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 31.32 ft
Screen Length: 10. ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.001723 cm/sec
y0 = 0.06642 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\RI\Slug_Tests\MW-110.aqt
Date: 03/25/10 Time: 15:21:17

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Gird
Location: Rensselaer NY
Test Well: MW-110
Test Date: 3/16/2010

AQUIFER DATA

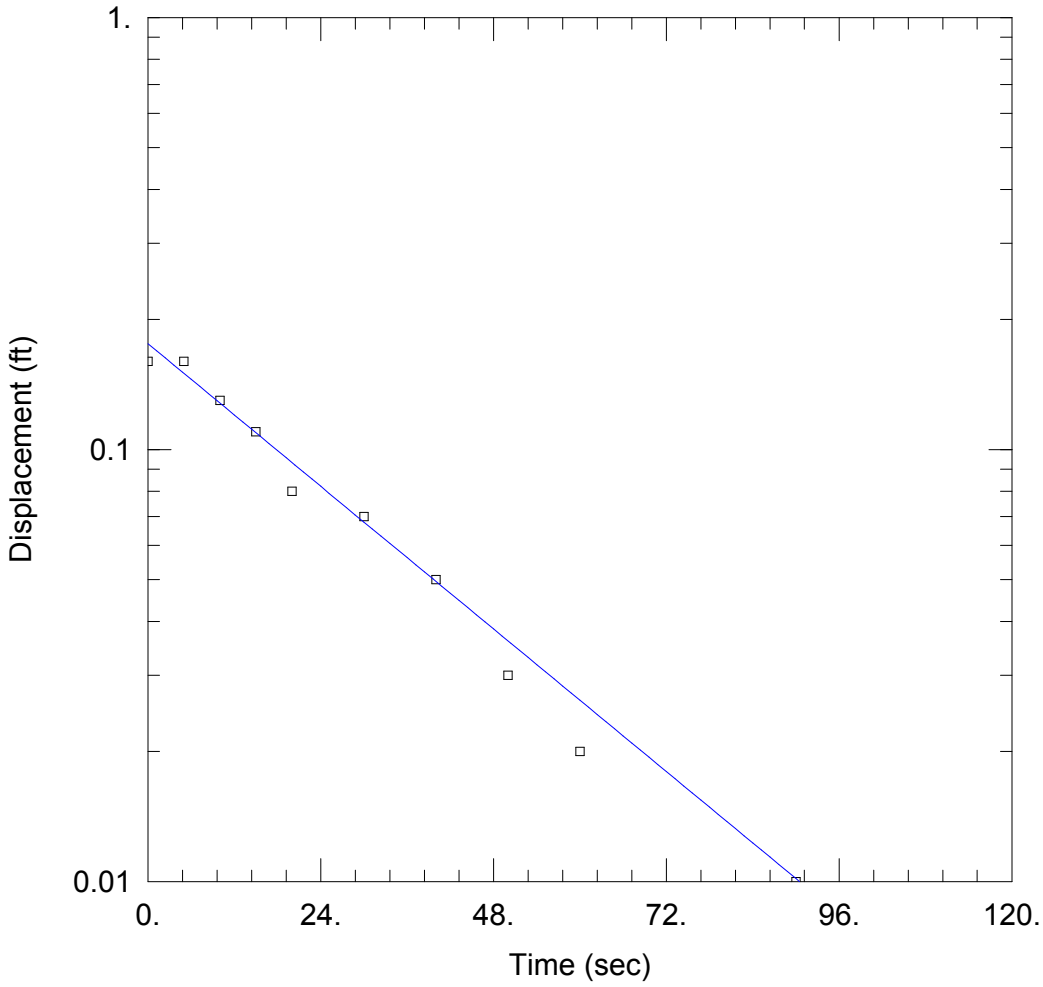
Saturated Thickness: 15.31 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-110)

Initial Displacement: 0.41 ft
Total Well Penetration Depth: 9.11 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 9.11 ft
Screen Length: 9.11 ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 5.68E-5 cm/sec
y0 = 0.2584 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\RI\Slug_Tests\MW-111.aqt
Date: 03/25/10 Time: 15:20:49

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Gird
Location: Rensselaer NY
Test Well: MW-111
Test Date: 3/16/2010

AQUIFER DATA

Saturated Thickness: 12.71 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-111)

Initial Displacement: 0.16 ft
Total Well Penetration Depth: 7.51 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 7.51 ft
Screen Length: 7.51 ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.001381 cm/sec
y0 = 0.1758 ft

APPENDIX C

Laboratory Data Packages (CD-ROM)

APPENDIX D

Data Usability Summary Reports (CD-ROM)