Data Summary Report
Supplemental RI Activities
Rensselaer Non-Owned
Former MGP Site
Rensselaer, New York

Prepared for

Niagara Mohawk Corporation

d/b/a National Grid, Syracuse, New York

August 2011

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Prepared for
Niagara Mohawk Corporation d/b/a National Grid
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August 2011

Project Number: 139984.203

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August 3, 2011

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139984.203

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

Dear Ms. Verrigni:

On behalf of National Grid, Brown and Caldwell Associates (BC) encloses a Data Summary Report (DSR) for supplemental 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 work plan for supplemental RI activities was submitted to the New York State Department of Environmental Conservation (DEC) in July 2010. Comments associated with the work plan were documented in letters from the DEC dated August 2 and 25, 2010. The comments were addressed in a letter from BC dated August 6, 2010 and in the revised work plan submitted to the DEC in September 2010, which was approved by the DEC in a letter dated September 21, 2010.

This DSR has been prepared in accordance with the September 2010 work plan. As listed in the Table of Contents, the DSR consists of 14 figures, 6 tables, and associated appendices.

Site Setting

The Site is located on Washington Street in the City of Rensselaer, Rensselaer County, New York (see Figure 1). The former MGP was located on land that is currently associated with a single parcel of property owned by the City of Rensselaer and is zoned for commercial use.

The Site is abutted to the northwest by Academy Street and residences on the opposite side of this street; to the southeast by Washington Street and the Capital View Office Park; and to the northeast by Huyck Square and undeveloped land surrounding Huyck

Stream on the opposite side of Huyck Square. The area surrounding the Site to the northeast, southeast and southwest is primarily used for commercial purposes. Residences are located to the northwest of the site.

The topography of the Site is generally flat with a slight decline from the west to the east, and from the south to the north. North of the Site across Huyck Square, the topography steepens towards Huyck Stream. The Hudson River is located approximately 800 feet west of the Site.

Based on a review of historical maps, the original MGP was apparently built between 1860 and 1887 and gas manufacturing at the Site ceased sometime between 1918 and 1925,

Scope of Investigation

Field investigation elements of the September 2010 work plan were completed, with the exception of advancement of soil boring B-126-10. The planned location of the soil boring was in close proximity to a subsurface vault structure and was therefore omitted from the field program. The intended objective of this location was satisfied with other nearby borings (e.g., B-124-10 and B-125-10).

Field activities were conducted during the period from October 12, 2010 through April 26, 2011. 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 on Figure 2.

Findings

The main findings of the RI activities to date are summarized below.

Subsurface Deposits & Stratigraphy

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 3 through 6, hydrogeologic cross-sections A-A', B-B', C-C', and D-D').

From examination of rock core samples and rock fragments retained in the split spoon sampler after refusal, the bedrock immediately underlying the Site can generally be described as grey to black shale that has undergone some degree of deformation. The surface of the bedrock (Figure 7) drops from approximately 1 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 bedrock surfaces are deeper, the till is overlain by approximately 2-15 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.

Hydrogeology

The water table occurs in the fill and the silt and sand deposit, generally about five to ten feet below ground surface. As part of the supplemental RI activities, groundwater levels were measured on November 15, 2010; March 28, 2011; and March 29, 2011 (Table 2). Surface water levels were measured in stream gauges on November 15, 2010 and March 28, 2011. Water table contours for March 28, 2011 (Figure 8) 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 south toward the stream. A local mounding of groundwater is apparent in the area of monitoring well MW-103. The area around this well is unpaved and snow plowed from the parking lot during the winter was piled in this area of the Site. Snow melt during the time preceding the March 28 water level measurements would have contributed to localized recharge in this area of the site.

Water levels measured in the deep/shallow well pair MW 106S/D on the above dates indicate an upward gradient. Water levels measured in deep/shallow well pair MW-109S/D indicate an upward gradient on November 15, 2010 and March 29, 2011, whereas a downward gradient is indicated on March 28, 2011. Water levels in wells screened in the deeper overburden materials (MW-106D and MW-109D) composed of course sand and gravel may be influenced by tidal fluctuations in the nearby Hudson River, which could account for the reversal of gradient observed. Similar subsurface deposits consisting of coarse sands and gravels were encountered at relatively the same elevation (from approximately 0 to -15 feet, NGVD) at the Troy (Water Street) former MGP Site located approximately seven miles upstream from the Rensselaer Site. Continuous water level monitoring data collected at the Troy Site from wells screened entirely within the coarse sand and gravel deposit indicated that heads in this unit are substantially influenced by tidal fluctuations. Given the potential for transient, tidally influenced heads at the Rensselaer site, continuous water level measurements through several tidal cycles (in shallow, deep and bedrock monitoring wells) would be necessary to conclusively evaluate vertical gradients at the Site.

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.

A summary of the estimated horizontal hydraulic conductivity (Kh) values from slug tests conducted on all monitoring wells is provided in Table 3. The Kh values, based on slug tests conducted on wells screened in overburden materials, range from 1.1×10^{-5} to 1.7×10^{-3} cm/sec. The saturated materials adjacent to the screens for the overburden wells are composed of a variety of subsurface deposits including: 1) silt and clay; 2) silt and clay and glacial till; 3) sand and silt and glacial till; 4) sand and silt; 5) fill and silt and sand; 6) fill and glacial till; and 7) sand and gravel and weathered till. The greatest hydraulic conductivities were measured in wells screened primarily in loose fill

(MW-111-09) or sand and gravel and weathered till (MW-109D-09). The lowest hydraulic conductivities were measured in wells screened in silt and clay and dense glacial till (MW-101-05) or sand and silt and glacial till (MW-104-08).

Table 3 also provides a summary of the estimated Kh values from slug tests conducted on the monitoring wells screened in the shallow bedrock. The estimated geometric mean Kh from for the water-bearing fractures in the shallow bedrock is 3.5×10^{-5} cm/sec, and ranges from 4.6×10^{-6} to 3.9×10^{-4} cm/sec.

Subsurface Utilities

A combined sanitary/storm sewer is present under Washington Street (Figure 2). In addition, a 24-inch sanitary sewer force main is present under Academy Street and extends northward beneath Huyck Stream, ultimately discharging to the sewer pump station located on the northern bank of the stream.

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 (see Figure 2). 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 March 28, 2011 were higher than the surveyed invert elevations of the combined sanitary/storm sewer in the vicinity of manhole MH-1 (8.7' NGVD, 8.9' NGVD), indicating a potential for groundwater to infiltrate the sewer pipe and the surrounding bedding (Figure 8 Water Table Contours; Figure 5 Cross-Section C-C'). However, evaluation of the available groundwater elevation data does not indicate appreciable 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 manhole MH-1 at that time.

Prior to implementing the supplemental RI activities, The City of Rensselaer's Engineering Department was visited to obtain records for additional underground utilities that may exist in the roads surrounding the Site (e.g., water mains, gas line, sewer force main). A drawing entitled City of Rensselaer Sanitary, Storm, and Combined Sewer Maps was reviewed and information relative to the Site was documented. Also, the approximate depth of the 24-inch sewer force main located along Academy Street was obtained via personal communications with the Department of Public Works' Commissioner.

Stream Sediment Probing

During the 2009 RI field activities, NAPL was encountered in borings completed approximately 20 feet south of Huyck Stream (B-113-09 and B-114-09). The NAPL was encountered at a depth of approximately 7 to 13 feet BGS. However, hand-auger borings drilled to a depth of four feet BGS at three locations closer to the stream (SOIL-2-08 through SOIL-4-08) did not encounter NAPL. Further, sampling and analysis of shallow sediment at SED-2-08 and SED-3-08 indicated there were no MGP-related

impacts in the upper six inches of stream sediment. To confirm that NAPL is not present in the upper several feet of sediment, a sediment probing program was conducted along three transects on November 10, 2010. Five to six locations along each transect were probed for evidence of NAPL. The sediment probing locations are shown on Figure 2. A metal rod was pushed several feet into the sediment at each probing location. Upon withdrawal of the rod from the stream, the rod and water were inspected for impact indicators such as NAPL, sheen and odors. Table 4provides a summary of the probing locations including the depth probed below the top of the sediment surface at each location. No observed impacts were noted upon withdrawal of the sediment probe at any probing location.

Subsurface Soil Analytical Results

Subsurface soil samples collected during the supplemental 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 375-6 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 9).

VOCs

In the supplemental RI soil samples, concentrations of benzene and ethylbenzene were detected above the applicable SCOs in four samples collected from two locations (B-127-10 and B-128-10). B-127-10 is located within the southern gas holder, while B-128-10 is located in the northern gas holder.

During the previous SC and RI activities, subsurface soil samples from 13 locations contained concentrations of benzene, toluene, ethylbenzene, or isomers of xylene (BTEX compounds) above one or more of the applicable SCOs (Figure 9).

Samples from previous RI and SC activities with exceedances of the SCOs for generally fall within areas impacted by NAPL

SVOCs

Polycyclic aromatic hydrocarbons (PAHs) were detected above one or more of the SCOs in supplemental RI soil samples from six locations.

During the previous SC and RI activities, subsurface soil samples from 17 locations contained concentrations of PAH compounds above one or more of the applicable SCOs (Figure 9).

The locations with exceedances of the SCOs for PAHs fall within areas impacted by NAPL or sheens. No other SVOCs were detected in the supplemental RI soil samples above the applicable SCOs.

Inorganics

Total Cyanide was not detected above the applicable SCOs in subsurface soil samples from any location.

NAPL Occurrence

Overburden

Figure 10 provides a plan view of locations where NAPL has been observed in overburden soil and/or within overburden monitoring wells throughout the course of the SC and RI field activities. Table 6 provides a description for these observations. The vertical positions of the observations are shown on the hydrogeologic cross sections (Figures 3 through 6). Where present, the NAPL is usually first encountered at depths of seven to ten feet bgs, or deeper. However, within the former MGP structures (tar well and gas holders), NAPL has been encountered at shallower depths (approximately five feet bgs). In general, the NAPL occurs as blebs or grain coatings within the overburden materials. More viscous NAPL with a roofing tar-like consistency was observed within the tar well. The intervals of NAPL in the overburden are typically less than two-feet in thickness; however, within the former MGP structures, the intervals of NAPL/tar are substantially thicker (e.g., approximately five feet thick in the tar well and 6.8 thick in the southern gas holder). Most of the NAPL observations exhibited tar-like odors and thus, NAPL at these locations is likely associated with former MGP operations. However, based on observations and odor, some of the NAPL encountered appeared to be petroleum-based and is not likely associated with former MGP operations. A review of historic maps indicated that coal carbonization was likely the process used at the MGP, which did not require petroleum as a feedstock.

Observations of NAPL within three overburden monitoring wells have been documented during NAPL gauging events (MW-102-05, MW-106S-08, and MW-106D-08). Typically, these observations include NAPL sheens and droplets on the interface probe when removed from the water surface (possible LNAPL) and black-brown NAPL adhering to the interface probe.

NAPL was observed at eight out of the 17 locations where soil borings were advanced through the overburden materials during the October/November 2010 RI activities. These observations indicate NAPL impacts farther to the south and east of those previously identified. For instance, NAPL was observed south of the southern gas holder in soil boring MW-113R-10 from approximately 8 to 8.9 feet bgs. East of Washington Street, NAPL (as blebs or grain coatings) with a tar like odor was observed in the silt and sand deposit overlying glacial till in borings B-120-10 (12 to 13.8 feet bgs) and B-125-10 (10.6 to 12 feet bgs). NAPL was observed below the silt and sand deposit within the underlying glacial till deposits at B-124-10 (12 to 14 and 15.5 to 16 feet bgs.

Bedrock

Although NAPL was not directly identified in the core samples collected from the seven bedrock drilling locations completed during the October/November 2010 RI activities, there are potential indications of NAPL within the bedrock, as follows:

- Sheens and a tar-like odor were observed in the return water during the coring process at MW-106R-10 (approximately 36.5 feet bgs).

- Concentrations of naphthalene in MW-102R-10 and MW-106R-10 were above one percent of the aqueous solubility limit, an empirical guideline that is used as an indicator of the potential presence of NAPL in the vicinity of the well. Of note, the naphthalene concentrations were detected above this level for the first round of sampling (November 2010), but not during the second round (March 2011).
- A spot of sheen with a tar-like odor was observed on the outside of the rock core at MW-108R-10 (approximately 49.8 feet bgs).

Groundwater Analytical Results

Two comprehensive rounds of groundwater sampling were conducted during the supplemental RI (November 2010 and March 2011). 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 7, Figures 11 through 14). In accordance with the work plan for supplemental 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. In addition, during the November 2010 event, samples were not collected from MW-102-10 due to presence of NAPL.

Provided below is a summary of overburden and bedrock groundwater quality data.

Overburden

Generally, the most prevalent constituents detected in overburden groundwater at levels above the Class GA criteria were BTEX compounds, naphthalene and total cyanide. These constituents are often associated with MGP-related residuals, but can also be related to non-MGP sources. These constituents are used as indicators for evaluating dissolved-phase impacts in overburden groundwater at the Site. Concentrations of BTEX and naphthalene in overburden groundwater for the sampling rounds conducted to date are posted on Figure 11, while the concentrations of total and free cyanide data are shown on Figure 12. Concentrations that are above the Class GA criteria are shown in bold type.

During the sampling rounds completed as part of the supplemental RI activities, BTEX and naphthalene concentrations were above the Class GA criteria in samples collected from MW-102-05 and MW-107-08. In addition, benzene and ethylbenzene were detected at concentrations above the applicable criteria in samples collected from MW-103-05.

As in previous RI sampling rounds, the only exceedance of the standard for Total Cyanide was in the upgradient well MW-101-05. Low (estimated) concentrations of free cyanide (4J and 7J µg/L) were also detected in the samples from this well.

Bedrock

Concentrations of BTEX and naphthalene in bedrock groundwater for the supplemental RI sampling rounds (November 2010 and March 2011) are posted on Figure 13, while the concentrations of total and free cyanide data are shown on Figure 14. Concentrations that are above the Class GA criteria are shown in bold type.

BTEX and naphthalene concentrations were above the Class GA criteria in samples collected from MW-102R-05 and MW-106R-10. Of note, results from the March 2011 sampling round for both wells revealed a substantial decrease in constituent concentrations from the November 2010 round, which was conducted relatively soon after the installation and development process. Such reductions are not uncommon with newly installed monitoring wells, which may have constituents introduced from shallower zones during the well drilling and construction process. Further, based on the water level data collected prior to the November 2010 sampling event, groundwater levels had not reached equilibrium at the MW-102R-10 location.

Total Cyanide was not detected above the Class GA criteria from any bedrock monitoring well.

Recommendations

The following recommendations are made with regard to future activities related to the Rensselaer Non-Owned Former MGP:

- **Delineate Soil Impacts.** NAPL and/or sheens were identified in soil at seven locations along the west side of the Capitol View Office Park, east of Washington Street. Additional soil borings should be advanced along the east side of the office building to further delineate these impacts.
- **Continuous Water Level Monitoring.** Inconsistent vertical gradients are indicated by water level measurements in some overburden and bedrock monitoring wells. These may reflect transient potentiometric changes in the deeper sand and gravel materials caused by tidal fluctuations in the nearby Hudson River. Continuous water level measurements over a period of approximately one to two weeks should be obtained by installing data logging pressure transducers in selected monitoring wells and staff gauges. The resulting data should be compared to tide data from the Hudson River.
- **Well Drawdown Testing.** Well pumping tests should be conducted to verify that downgradient bedrock monitoring wells MW-104R, MW-108R, and MW-112R are in hydraulic communication with potential source area wells MW-102R and MW-106R.
- **Additional Groundwater Sampling.** Two additional rounds of groundwater sampling should be conducted to evaluate dissolved phase impacts, particularly in bedrock monitoring wells MW-102R and MW-106R. BTEX and naphthalene concentrations in these wells have declined significantly since they were first sampled in November 2010.

Please review this submittal at your earliest convenience. Upon approval of this RI Data Summary Report, a work plan will be developed that discusses the additional proposed RI activities.

Very truly yours,

Brown and Caldwell Associates

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Enclosures

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TABLE 1
SUMMARY OF BACKGROUND INFORMATION FOR INVESTIGATORY SAMPLE LOCATIONS
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	10.9	5.5	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
B-118-10	11/2/2010	1387568.9	695227.5	18.22	4.3	13.9	8.6	9.6	--	--	--	--	--	--	13.5	4.7
B-119-10	11/1/2010	1387599.3	695469.4	16.21	8.9	7.3	--	--	--	--	--	--	--	--	16.0	0.2
B-120-10	11/1/2010	1387588.5	695461.5	16.35	12.9	3.5	16.0	0.4	--	--	--	--	--	--	19.6	-3.3
B-121-10	11/1/2010	1387568.5	695453.1	16.46	5.8	10.7	14.5	14.5	--	--	--	--	--	--	16.0	0.5
B-122-10	11/1/2010	1387542.3	695460.6	16.57	5.0	11.6	--	--	--	--	--	--	--	--	16.0	0.6
B-123-10	11/2/2010	1387511.5	695461.4	16.52	2.6	13.9	9.0	7.5	--	--	--	--	--	--	16.0	0.5
B-124-10	11/2/2010	1387531.6	695441.0	16.78	2.7	14.1	10.4	6.4	--	--	--	--	--	--	19.0	-2.2
B-125-10	11/2/2010	1387523.5	695414.9	16.69	7.6	9.1	12.7	4.0	--	--	--	--	--	--	14.0	2.7
B-127-10	11/2/2010	1387589.6	695297.6	17.34	--	--	--	--	--	--	--	--	--	--	12.4	4.9
B-128-10	11/2/2010	1387595.0	695336.3	16.66	--	--	--	--	--	--	--	--	--	--	9.0	7.7
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

TABLE 1
SUMMARY OF BACKGROUND INFORMATION FOR INVESTIGATORY SAMPLE LOCATIONS
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location ID	Installation Date	Survey Coordinates NY State Plane - NAD 83 Northing	Survey Coordinates NY State Plane - NAD 83 Easting	Ground Surface Elevation[1] (ft., NGVD)	Depth to Base of Fill (ft., BGS)	Base of Fill Elevation (ft., NGVD)	Depth to Glacial Till (ft., BGS)	Glacial Till Elevation (ft., NGVD)	Depth to Bedrock (ft., BGS)	Bedrock Elevation (ft., NGVD)	Screened Interval Top (ft., BGS)	Screened Interval Bottom (ft., BGS)	Screened Interval Top (ft., NGVD)	Screened Interval Bottom (ft., NGVD)	Total Depth (ft., BGS)	Total Depth (ft., NGVD)
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-102R-10	11/1/2010	1387611.2	695363.1	16.33	4.0	12.3	16.4	-0.1	23.0	-6.7	28.0	38.0	-11.7	-21.7	46.0	-29.7
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-104R-10	11/1/2010	1387652.1	695262.7	17.85	4.0	13.9	9.6	8.3	24.4	-6.6	30.0	40.0	-12.2	-22.2	47.0	-29.2
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
MW-106R-10	11/2/2010	1387669.2	695384.3	16.45	--	--	--	--	--	--	31.0	41.0	-14.6	-24.6	44.0	-27.6
MW-107-08	12/3/2008	1387569.2	695374.9	15.78	2.0	13.8	13.0	2.8	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-108R-10	10/20/2010	1387898.1	695385.8	15.49	--	--	--	--	--	--	43.0	53.0	-27.5	-37.5	64.5	-49.0
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	--	--	7.0	17.0	9.4	-0.6	25.5	-9.1
MW-110R-10	10/20/2010	1387665.9	695503.3	16.40	--	--	--	--	29.8	-13.4	33.0	43.0	-16.6	-26.6	51.5	-35.1
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
MW-112-10	10/22/2010	1387759.0	695262.1	16.91	--	--	--	--	--	--	8.0	18.0	8.9	-1.1	19.0	-2.1
MW-112R-10	10/21/2010	1387752.0	695266.9	16.95	2.5	14.5	14.9	2.1	19.4	-2.5	27.0	37.0	-10.1	-20.1	44.5	-27.6
MW-113R-10	10/28/2010	1387541.9	695285.9	17.08	4.0	13.1	10.4	6.7	24.0	-6.9	36.0	46.0	-18.9	-28.9	46.5	-29.4
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

TABLE 1
SUMMARY OF BACKGROUND INFORMATION FOR INVESTIGATORY SAMPLE LOCATIONS
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location ID	Installation Date	Survey Coordinates NY State Plane - NAD 83 Northing	Survey Coordinates NY State Plane - NAD 83 Easting	Ground Surface Elevation[(1)] (ft., NGVD)	Depth to Base of Fill (ft., BGS)	Base of Fill Elevation (ft., NGVD)	Depth to Glacial Till (ft., BGS)	Glacial Till Elevation (ft., NGVD)	Depth to Bedrock (ft., BGS)	Bedrock Elevation (ft., NGVD)	Screened Interval Top (ft., BGS)	Screened Interval Bottom (ft., BGS)	Screened Interval Top (ft., NGVD)	Screened Interval Bottom (ft., NGVD)	Total Depth (ft., BGS)	Total Depth (ft., NGVD)
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	1387821.7	695482.3	10.49	--	--	--	--	--	--	--	--	--	--	--	--
SG-2-09	11/16/2009	1387825.9	695378.3	10.43	--	--	--	--	--	--	--	--	--	--	--	--
SG-3-10	11/10/2010	1387826.8	695367.8	11.01												
SG-4-10	11/10/2010	1387802.8	695538.9	17.19												

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

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		3.3	7.13	NM	NA	NM	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)	11/15/2010				3/28/2011		3/29/2011			
			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 Water (ft., BTOC)	Water Elevation (ft., NGVD)	Depth to NAPL (ft., BTOC)	Comments
MW-101-05	16.99	4-14	5.17	11.82	ND	Faint tar-like odor	4.85	12.14	4.97	12.02	ND	Slight tar-like odor
MW-102-05	15.96	5-20	6.95	9.01	ND	Strong tar-like odor; NAPL on probe when removed from water surface (LNAPL); Black-brown NAPL on probe when removed from base of well (DNAPL); Approximately 2-inches of NAPL in bottom of bailer.	5.97	9.99	6.03	9.93	ND	Moderate/strong tar-like odor
MW-102R-10	15.91	28-38	11.55	(7)	ND		6.29	9.62	6.40	9.51	ND	Moderate/strong tar-like odor
MW-103-05	17.19	5-20	8.78	8.41	ND		5.99	11.20	6.04	11.15	ND	
MW-104-08	17.14	6-16	6.61	10.53	ND		6.65	10.49	6.63	10.51	ND	
MW-104R-10	17.55	30-40	8.29	9.26	ND	Sulfur-like odor	8.01	9.54	8.12	9.43	ND	Slight odor
MW-105-08	19.10	8-16	11.81	7.29	ND	Moderate tar-like odor	11.10	8.00	11.13	7.97	ND	
MW-106S-08	19.10	8-18	11.15	7.95	ND(2)	Sheen and small NAPL blebs on silt from bottom of well.	10.51	8.59	10.52	8.58	ND(2)	Moderate/strong tar-like odor; NAPL blebs on probe when removed from bottom of well
MW-106D-08	18.98	19-24	10.52	8.46	ND(2)	Strong tar-like odor; NAPL blebs on probe when removed from water surface; NAPL blebs within and on outside of bailer	9.49	9.49	10.04	8.94	ND(2)	Strong tar-like odor; NAPL blebs on probe measuring tape
MW-106R-10	18.06	31-41	9.57	(7)	ND	Moderate tar-like odor	8.78	9.28	8.86	9.20	ND	Slight tar-like odor
MW-107-08	15.30	5-15	5.19	10.11	ND	Moderate tar-like odor	4.65	10.65	4.71	10.59	ND	
MW-108-09	15.47	7-17	8.01	7.46	ND		7.15	8.32	7.32	8.15	ND	
MW-108R-10	15.00	43-53	9.27	(7)	ND		5.76	9.24	9.62	(8)	ND	
MW-109S-09	15.33	7-17	7.52	7.81	ND		6.29	9.04	10.11	(8)	ND	
MW-109D-09	15.36	28-38	7.41	7.95	ND		7.47	7.89	7.55	7.81	ND	
MW-110-09	16.06	7-17	7.96	8.10	ND		7.71	8.35	7.83	8.23	ND	
MW-110R-10	15.94	33-43	8.13	(7)	ND		6.84	9.10	6.78	9.16	ND	
MW-111-09	16.06	5-15	7.62	8.44	ND		7.04	9.02	7.05	9.01	ND	
MW-112-10	16.50	8-18	8.83	7.67	ND		7.93	8.57	8.00	8.50	ND	
MW-112R-10	16.60	27-37	8.55	(7)	ND	Sulfur-like odor	8.16	8.44	8.30	8.30	ND	
MW-113R-10	16.67	36-46	20.48	(7)	ND		7.04	9.63	7.05	9.62	ND	
SG-1-09	10.49	NA	(6)	NA	NA		(6)	NA	(6)	NA	NA	
SG-2-09	10.43	NA	(6)	NA	NA		(6)	NA	(6)	NA	NA	
SG-3-10	11.01	NA	4.03	6.98	--		NM	NM	NM	NM	NA	
SG-4-10	17.19	NA	10.15	7.04	--		10.00	7.19	NM	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) - Thin film 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, NAPL blebs with a tar-like odor were observed on the end of the probe or on measuring tape.
(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.
(6) - Staff gauge destroyed.
(7) - Water elevation not representative of static conditions. Water level measurements collected prior to water level reaching equilibrium with atmosphere.
(8) - Calculated water elevation considered anamolous.

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(8)	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-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-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
MW-112-10	8-18	Fill(6.9)/Glacial Till(3.1)	Fill/Glacial Till	4/25/2011	4.7E-04
Deeper Overburden Wells					
MW-106D-08	19-24	Sand and Gravel(1)/Glacial Till(5)	Sand and Gravel/Glacial Till	4/29/2009	1.9E-04
MW-109D-09	28-38	Sand and Silt(3.1)/Sand and Gravel(1.6)/Weathered	Sand and Gravel/Weathered Till	3/16/2010	1.7E-03
Bedrock Wells					
MW-102R-10	28-38	Bedrock(10)	Bedrock	4/25/2011	4.6E-06
MW-104R-10	30-40	Bedrock(10)	Bedrock	4/25/2011	2.7E-04
MW-106R-10	31-41	Bedrock(10)	Bedrock	4/25/2011	1.6E-05
MW-108R-10	43-53	Bedrock(10)	Bedrock	4/25/2011	1.1E-05
MW-110R-10	33-43	Bedrock(10)	Bedrock	4/25/2011	3.9E-04
MW-112R-10	27-37	Bedrock(10)	Bedrock	4/25/2011	2.1E-05
MW-113R-10	36-46	Bedrock(10)	Bedrock	4/25/2011	(4)
				Geometric Mean	3.5E-05

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.
(4) - Recovery too slow for accurate calculation of estimated hydraulic conductivity.

TABLE 4
SEDIMENT PROBING SUMMARY
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

Location ID	Date Completed	Depth to Sediment (feet below water surface)	Depth Probed (feet below top of sediment)	Remarks
Sediment Probing Stations				
T-1A	11/10/2010	1.7	3.4	no observed impacts noted upon withdrawal of sediment probe.
T-1B	11/10/2010	5	3	no observed impacts noted upon withdrawal of sediment probe.
T-1C	11/10/2010	4	3	no observed impacts noted upon withdrawal of sediment probe.
T-1D	11/10/2010	3	3	no observed impacts noted upon withdrawal of sediment probe.
T-1E	11/10/2010	2	3	no observed impacts noted upon withdrawal of sediment probe.
T-2A	11/10/2010	1.2	4	no observed impacts noted upon withdrawal of sediment probe.
T-2B	11/10/2010	1.5	3	no observed impacts noted upon withdrawal of sediment probe.
T-2C	11/10/2010	1.3	3.1	no observed impacts noted upon withdrawal of sediment probe.
T-2D	11/10/2010	1.3	3	no observed impacts noted upon withdrawal of sediment probe.
T-2E	11/10/2010	0.8	5	no observed impacts noted upon withdrawal of sediment probe.
T-2F	11/10/2010	0.4	5.4	no observed impacts noted upon withdrawal of sediment probe.
T-3A	11/11/2010	0.35	5.3	no observed impacts noted upon withdrawal of sediment probe.
T-3B	11/11/2010	1	4.7	no observed impacts noted upon withdrawal of sediment probe.
T-3C	11/11/2010	2.5	5.2	no observed impacts noted upon withdrawal of sediment probe.
T-3D	11/11/2010	2.3	4.5	no observed impacts noted upon withdrawal of sediment probe.
T-3E	11/11/2010	1.8	6.1	no observed impacts noted upon withdrawal of sediment probe.

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-118-10 4-6 11/2/2010	B-118-10 10-12 11/2/2010	B-119-10 4-6 11/1/2010	B-119-10 8-10 11/1/2010	B-120-10 12-14 11/1/2010
Volatile Organic Compounds (VOCs)									
BTEX									
Benzene	2.9	70	0.06	mg/kg	0.00031 U	0.00047 J	0.00031 U	0.037	0.0031 J
Toluene	100	36	0.7	mg/kg	0.00044 U	0.00036 U	0.00044 U	0.00048 U	0.00049 U
Ethylbenzene	30	NE	1	mg/kg	0.0003 U	0.00025 U	0.0003 U	0.0057 J	0.00055 J
1,2-Dimethylbenzene (o-Xylene)	NE	NE	NE	mg/kg	0.00043 U	0.00035 U	0.00043 U	0.00087 J	0.0019 J
m,p-Xylene (sum of isomers)	NE	NE	NE	mg/kg	0.00083 U	0.00069 U	0.00084 U	0.0014 J	0.0016 J
Xylenes, Total	100	0.26	1.6	mg/kg	ND	ND	ND	0.00227	0.0035
Total BTEX	NE	]	NE	mg/kg	ND	0.00047	ND	0.04497	0.00715
Other VOCs									
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.0005 U	0.00042 U	0.0005 U	0.00055 U	0.00056 U
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.00059 U	0.00049 U	0.00059 U	0.00065 U	0.00066 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	NE	NE	mg/kg	0.00031 U	0.00026 U	0.00031 U	0.00034 U	0.00035 U
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.00051 U	0.00043 U	0.00052 U	0.00056 U	0.00057 U
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.00049 U	0.00041 U	0.00049 U	0.00054 U	0.00054 U
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.00058 U	0.00048 U	0.00058 U	0.00063 U	0.00064 U
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.00048 UJ	0.0004 UJ	0.00048 U	0.00052 U	0.00053 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	NE	NE	mg/kg	0.00095 U	0.00079 U	0.00095 U	0.0011 U	0.0011 U
1,2-Dibromoethane (EDB)	NE	NE	NE	mg/kg	0.00039 U	0.00032 U	0.00039 U	0.00042 U	0.00043 U
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.00034 U	0.00028 U	0.00034 U	0.00037 U	0.00037 U
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.0005 U	0.00042 U	0.0005 U	0.00055 U	0.00056 U
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.00043 U	0.00035 U	0.00043 U	0.00047 U	0.00047 U
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.00055 U	0.00046 U	0.00055 U	0.00061 U	0.00061 U
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.00039 U	0.00032 U	0.00039 U	0.00042 U	0.00043 U
2-Butanone (MEK)	100	100	0.12	mg/kg	0.0013 U	0.0011 U	0.0013 U	0.0014 U	0.03
2-Hexanone	NE	NE	NE	mg/kg	0.00069 U	0.00057 U	0.0007 U	0.00076 U	0.00077 U
4-Methyl-2-pentanone (MIBK)	NE	NE	NE	mg/kg	0.00072 U	0.0006 U	0.00072 U	0.00079 U	0.0008 U
Acetone	100	2.2	0.05	mg/kg	0.002 U	0.0016 U	0.0029 J	0.0059 J	**0.082**
Bromodichloromethane	NE	NE	NE	mg/kg	0.00049 U	0.00041 U	0.00049 U	0.00054 U	0.00054 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-118-10 4-6 11/2/2010	B-118-10 10-12 11/2/2010	B-119-10 4-6 11/1/2010	B-119-10 8-10 11/1/2010	B-120-10 12-14 11/1/2010
Bromoform	NE	NE	NE	mg/kg	0.00034 U	0.00028 U	0.00034 U	0.00037 U	0.00037 U
Bromomethane	NE	NE	NE	mg/kg	0.0006 U	0.0005 U	0.00061 U	0.00066 U	0.00067 U
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.00058 U	0.00048 U	0.00058 U	0.00063 U	0.00064 U
Carbon disulfide	NE	NE	NE	mg/kg	0.00065 U	0.00054 U	0.00066 U	0.0033 J	0.002 J
Chlorobenzene	100	40	1.1	mg/kg	0.00049 U	0.00041 U	0.00049 U	0.00054 U	0.00054 U
Chloroethane	NE	NE	NE	mg/kg	0.00055 U	0.00046 U	0.00055 U	0.00061 U	0.00061 U
Chloroform	10	12	0.37	mg/kg	0.00058 U	0.00048 U	0.00058 U	0.00063 U	0.00064 U
Chloromethane	NE	NE	NE	mg/kg	0.00088 UJ	0.00073 UJ	0.00089 UJ	0.00097 UJ	0.00098 UJ
Cyclohexane	NE	NE	NE	mg/kg	0.00054 U	0.00045 U	0.00054 U	0.00059 U	0.0006 U
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.00057 U	0.00047 U	0.00057 U	0.00062 U	0.00063 U
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00054 U	0.00045 U	0.00054 U	0.00059 U	0.0006 U
Dibromochloromethane	NE	NE	NE	mg/kg	0.00041 U	0.00034 U	0.00041 U	0.00045 U	0.00046 U
Dichlorodifluoromethane (Freon 12)	NE	NE	NE	mg/kg	0.00064 U	0.00053 U	0.00064 U	0.0007 U	0.00071 U
Isopropylbenzene (Cumene)	NE	NE	NE	mg/kg	0.00031 U	0.00026 U	0.00031 U	0.00034 U	0.013
Methyl acetate	NE	NE	NE	mg/kg	0.00068 U	0.00056 U	0.00068 U	0.00075 U	0.00076 U
Methylcyclohexane	NE	NE	NE	mg/kg	0.00031 U	0.00026 U	0.00031 U	0.00034 U	0.0048 J
Methylene chloride	51	12	0.05	mg/kg	0.00069 U	0.00057 U	0.0012 J	0.0012 J	0.0012 J
tert-Butyl methyl ether (MTBE)	62	NE	0.93	mg/kg	0.00044 U	0.00036 U	0.00044 U	0.00048 U	0.00049 U
Styrene	NE	NE	NE	mg/kg	0.0004 U	0.00033 U	0.0004 U	0.00044 U	0.00044 U
Tetrachloroethene (PCE)	5.5	2	1.3	mg/kg	0.0005 U	0.00042 U	0.0005 U	0.00055 U	0.00056 U
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.0004 U	0.00033 U	0.0004 U	0.00044 U	0.00044 U
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.0005 U	0.00042 U	0.0005 U	0.00055 U	0.00056 U
Trichloroethene (TCE)	10	2	0.47	mg/kg	0.00046 U	0.00038 U	0.00047 U	0.00051 U	0.00052 U
Trichlorofluoromethane (Freon 11)	NE	NE	NE	mg/kg	0.00039 U	0.00032 U	0.00039 U	0.00042 U	0.00043 U
Vinyl chloride	0.21	NE	0.02	mg/kg	0.00023 U	0.00019 U	0.00024 UJ	0.00026 U	0.00026 UJ

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-118-10 4-6 11/2/2010	B-118-10 10-12 11/2/2010	B-119-10 4-6 11/1/2010	B-119-10 8-10 11/1/2010	B-120-10 12-14 11/1/2010
Semi-volatile Organic Compounds (SVOCs)									
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	100	20	98	mg/kg	0.021 U	0.017 U	0.021 U	1.7	0.21 J
Acenaphthylene	100	NE	107	mg/kg	0.016 U	0.013 U	0.016 U	0.32 J	0.15 J
Anthracene	100	NE	1000	mg/kg	0.025 U	0.021 U	0.025 U	1 J	0.4 J
Benzo(a)anthracene	1	NE	1	mg/kg	0.017 U	0.014 U	0.017 U	**7.6**	**1.4**
Benzo(a)pyrene	1	2.6	22	mg/kg	0.032 U	0.027 U	0.032 U	**8.4**	**1.4**
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	0.045 UJ	0.037 U	0.045 UJ	**5.6 J**	0.86 J
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	0.025 U	0.021 U	0.025 U	4.8	0.66
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	0.035 U	0.029 U	0.035 U	**6**	0.9
Chrysene	1	NE	1	mg/kg	0.029 U	0.024 U	0.029 U	**6.6**	**1.3**
Dibenz(a,h)anthracene	0.33	NE	1000	mg/kg	0.035 U	0.029 U	0.035 U	**1.7**	0.23 J
Fluoranthene	100	NE	1000	mg/kg	0.044 J	0.025 U	0.030 U	7.5	1.7
Fluorene	100	30	386	mg/kg	0.021 U	0.017 U	0.021 U	0.59 J	0.14 J
Indeno(1,2,3-c,d)pyrene	0.5	NE	8.2	mg/kg	0.027 U	0.023 U	0.027 U	**4.8**	**0.66**
Naphthalene	100	NE	12	mg/kg	0.020 U	0.016 U	0.020 U	11	0.5
Phenanthrene	100	NE	1000	mg/kg	0.023 U	0.019 U	0.024 U	2.5	0.96
Pyrene	100	NE	1000	mg/kg	0.022 U	0.018 U	0.022 U	6.2	1.6
2-Methylnaphthalene	NE	NE	NE	mg/kg	0.022 U	0.018 U	0.022 U	0.79 J	0.08 J
Total PAHs	NE	NE	NE	mg/kg	0.044	ND	ND	77.1	13.2
Other SVOCs									
Biphenyl (Diphenyl)	NE	NE	NE	mg/kg	0.04 U	0.033 U	0.04 U	0.42 J	0.044 U
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	0.045 U	0.037 U	0.045 U	0.15 U	0.05 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	0.031 U	0.026 U	0.031 U	0.11 U	0.035 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	0.026 U	0.022 U	0.026 U	0.084 U	0.029 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	0.029 U	0.024 U	0.029 U	0.093 U	0.032 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	1.2 U	0.93 UJ	1.2 U	3.7 U	1.3 U
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	0.039 UJ	0.032 U	0.039 U	0.13 U	0.043 U
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	0.023 U	0.019 U	0.024 U	0.076 U	0.026 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-118-10 4-6 11/2/2010	B-118-10 10-12 11/2/2010	B-119-10 4-6 11/1/2010	B-119-10 8-10 11/1/2010	B-120-10 12-14 11/1/2010
2-Chloronaphthalene	NE	NE	NE	mg/kg	0.02 U	0.016 U	0.02 U	0.063 U	0.022 U
2-Chlorophenol	NE	NE	NE	mg/kg	0.049 U	0.041 U	0.049 U	0.16 U	0.054 U
2-Methylphenol (o-cresol)	100	NE	0.33	mg/kg	0.031 U	0.026 U	0.031 U	0.11 U	0.035 U
2-Nitroaniline	NE	NE	NE	mg/kg	0.66 U	0.55 U	0.67 U	2.2 U	0.74 U
2-Nitrophenol	NE	NE	NE	mg/kg	0.032 U	0.027 U	0.032 U	0.11 U	0.036 U
3,3'-Dichlorobenzidine (3- and -4 Methylphenol coellution)	34	NE	0.33	mg/kg	0.036 U	0.03 U	0.036 U	0.12 U	0.04 U
3-Nitroaniline	NE	NE	NE	mg/kg	0.69 U	0.57 U	0.69 U	2.3 U	0.76 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	0.65 U	0.54 U	0.66 U	2.2 U	0.73 U
4-Bromophenyl phenyl ether	NE	NE	NE	mg/kg	0.02 U	0.016 U	0.02 U	0.063 U	0.022 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.018 U	0.015 U	0.018 U	0.059 U	0.02 U
4-Chloroaniline	NE	NE	NE	mg/kg	0.034 U	0.028 U	0.034 U	0.11 U	0.037 U
4-Chlorophenyl phenyl ether	NE	NE	NE	mg/kg	0.039 U	0.032 U	0.039 U	0.13 U	0.043 U
4-Nitroaniline	NE	NE	NE	mg/kg	0.53 U	0.44 U	0.53 U	1.8 U	0.59 U
4-Nitrophenol	NE	NE	NE	mg/kg	0.66 U	0.55 UJ	0.66 U	2.2 U	0.73 U
Acetophenone	NE	NE	NE	mg/kg	0.055 U	0.046 U	0.055 U	0.19 U	0.061 U
Atrazine	NE	NE	NE	mg/kg	0.078 UJ	0.065 U	0.079 U	0.26 U	0.087 U
Benzaldehyde	NE	NE	NE	mg/kg	0.076 U	0.063 U	0.076 U	0.25 U	0.084 U
2,2-oxybis(1-Chloropropane)	NE	NE	NE	mg/kg	0.051 UJ	0.043 UJ	0.052 UJ	0.17 UJ	0.057 UJ
bis(2-Chloroethoxy)methane	NE	NE	NE	mg/kg	0.04 U	0.033 U	0.04 U	0.13 U	0.044 U
bis(2-Chloroethyl)ether	NE	NE	NE	mg/kg	0.022 U	0.018 U	0.022 U	0.072 U	0.025 U
bis(2-Ethylhexyl)phthalate	NE	NE	NE	mg/kg	0.071 U	0.059 U	0.071 U	0.24 U	0.079 U
Caprolactam	NE	NE	NE	mg/kg	0.049 U	0.041 U	0.049 U	0.16 U	0.054 U
Carbazole	NE	NE	NE	mg/kg	0.069 U	0.057 U	0.07 U	0.43 J	0.077 U
Dibenzofuran	14	NE	210	mg/kg	0.02 U	0.016 U	0.02 U	0.22 J	0.049 J
Benzyl butyl phthalate	NE	NE	NE	mg/kg	0.021 U	0.017 U	0.021 U	0.068 U	0.023 U
Diethyl phthalate	NE	NE	NE	mg/kg	0.029 U	0.024 U	0.029 U	0.093 U	0.032 U
Dimethyl phthalate	NE	NE	NE	mg/kg	0.021 U	0.017 U	0.021 U	0.068 U	0.023 U
dl-n-Butyl phthalate	NE	NE	NE	mg/kg	0.18 U	0.15 U	0.18 U	0.57 U	0.2 U
dl-n-Octyl phthalate	NE	NE	NE	mg/kg	0.035 U	0.029 U	0.035 U	0.12 U	0.039 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	0.025 U	0.021 U	0.025 U	0.08 U	0.027 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-118-10 4-6 11/2/2010	B-118-10 10-12 11/2/2010	B-119-10 4-6 11/1/2010	B-119-10 8-10 11/1/2010	B-120-10 12-14 11/1/2010
Hexachlorobutadiene	NE	NE	NE	mg/kg	0.026 U	0.022 U	0.026 U	0.084 U	0.029 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	0.032 U	0.027 U	0.032 U	0.11 U	0.036 U
Hexachloroethane	NE	NE	NE	mg/kg	0.036 U	0.03 U	0.036 U	0.12 U	0.04 U
Isophorone	NE	NE	NE	mg/kg	0.026 U	0.022 U	0.026 U	0.084 U	0.029 U
Nitrobenzene	NE	NE	NE	mg/kg	0.05 U	0.042 U	0.05 U	0.17 U	0.056 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	0.027 U	0.023 U	0.027 U	0.088 U	0.03 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	0.02 U	0.016 U	0.02 U	0.063 U	0.022 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	0.72 U	0.6 U	0.73 U	2.4 U	0.81 U
Phenol	100	30	0.33	mg/kg	0.029 U	0.024 U	0.029 U	0.093 U	0.032 U
Inorganic Constituents									
Cyanide, total	27	NE	40	mg/kg	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Cyanide, free	NE	NE	NE	mg/kg	0.0189 UJ	0.0159 UJ	0.0194 UJ	0.0209 UJ	0.0277 J

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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-120-10 16-18 11/1/2010	B-121-10 4-6 11/1/2010	B-121-10 8-10 11/1/2010	B-122-10 4-6 11/1/2010	B-122-10 10-12 11/1/2010
Volatile Organic Compounds (VOCs)									
BTEX									
Benzene	2.9	70	0.06	mg/kg	0.00033 J	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Toluene	100	36	0.7	mg/kg	0.00038 U	0.00042 U	0.00043 U	0.00042 U	0.00042 U
Ethylbenzene	30	NE	1	mg/kg	0.00026 U	0.00029 U	0.00029 U	0.00029 U	0.00028 U
1,2-Dimethylbenzene (o-Xylene)	NE	NE	NE	mg/kg	0.00037 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
m,p-Xylene (sum of isomers)	NE	NE	NE	mg/kg	0.00073 U	0.00081 U	0.00081 U	0.0008 U	0.0008 U
Xylenes, Total	100	0.26	1.6	mg/kg	ND	ND	ND	ND	ND
Total BTEX	NE	]	NE	mg/kg	ND	ND	ND	ND	ND
Other VOCs									
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.00044 U	0.00049 U	0.00049 U	0.00048 U	0.00048 U
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.00052 U	0.00057 U	0.00057 U	0.00057 U	0.00056 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	NE	NE	mg/kg	0.00027 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.00045 U	0.0005 U	0.0005 U	0.00049 U	0.00049 U
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.00043 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.00051 U	0.00056 U	0.00056 U	0.00055 U	0.00055 U
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.00042 U	0.00046 U	0.00046 U	0.00046 U	0.00046 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	NE	NE	mg/kg	0.00083 U	0.00092 U	0.00092 U	0.00091 U	0.00091 U
1,2-Dibromoethane (EDB)	NE	NE	NE	mg/kg	0.00034 U	0.00037 U	0.00038 U	0.00037 U	0.00037 U
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.00029 U	0.00033 U	0.00033 U	0.00032 U	0.00032 U
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.00044 U	0.00049 U	0.00049 U	0.00048 U	0.00048 U
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.00037 U	0.00041 U	0.00041 U	0.00041 U	0.00041 U
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.00048 U	0.00054 U	0.00054 U	0.00053 U	0.00053 U
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.00034 U	0.00037 U	0.00038 U	0.00037 U	0.00037 U
2-Butanone (MEK)	100	100	0.12	mg/kg	0.0011 U	0.0012 U	0.002 J	0.0012 U	0.0012 U
2-Hexanone	NE	NE	NE	mg/kg	0.00061 U	0.00067 U	0.00067 U	0.00066 U	0.00066 U
4-Methyl-2-pentanone (MIBK)	NE	NE	NE	mg/kg	0.00063 U	0.0007 U	0.0007 U	0.00069 U	0.00069 U
Acetone	100	2.2	0.05	mg/kg	0.0018 J	0.0035 J	0.0081 J	0.0021 J	0.0019 U
Bromodichloromethane	NE	NE	NE	mg/kg	0.00043 U	0.00047 U	0.00047 U	0.00047 U	0.00047 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-120-10 16-18 11/1/2010	B-121-10 4-6 11/1/2010	B-121-10 8-10 11/1/2010	B-122-10 4-6 11/1/2010	B-122-10 10-12 11/1/2010
Bromoform	NE	NE	NE	mg/kg	0.00029 U	0.00033 U	0.00033 U	0.00032 U	0.00032 U
Bromomethane	NE	NE	NE	mg/kg	0.00053 U	0.00058 U	0.00059 U	0.00058 U	0.00058 U
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.00051 U	0.00056 U	0.00056 U	0.00055 U	0.00055 U
Carbon disulfide	NE	NE	NE	mg/kg	0.00057 U	0.00063 U	0.00064 U	0.00063 U	0.00063 U
Chlorobenzene	100	40	1.1	mg/kg	0.00043 U	0.00047 U	0.00047 U	0.00047 U	0.00047 U
Chloroethane	NE	NE	NE	mg/kg	0.00048 U	0.00054 U	0.00054 U	0.00053 U	0.00053 U
Chloroform	10	12	0.37	mg/kg	0.00051 U	0.00056 U	0.00078 J	0.00055 U	0.00055 U
Chloromethane	NE	NE	NE	mg/kg	0.00077 UJ	0.00086 UJ	0.00086 UJ	0.00085 UJ	0.00084 UJ
Cyclohexane	NE	NE	NE	mg/kg	0.00047 U	0.00052 U	0.00052 U	0.00052 U	0.00052 U
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.0005 U	0.00055 U	0.00055 U	0.00054 U	0.00054 U
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00047 U	0.00052 U	0.00052 U	0.00052 U	0.00052 U
Dibromochloromethane	NE	NE	NE	mg/kg	0.00036 U	0.0004 U	0.0004 U	0.00039 U	0.00039 U
Dichlorodifluoromethane (Freon 12)	NE	NE	NE	mg/kg	0.00056 U	0.00062 U	0.00062 U	0.00061 U	0.00061 U
Isopropylbenzene (Cumene)	NE	NE	NE	mg/kg	0.00027 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Methyl acetate	NE	NE	NE	mg/kg	0.0006 U	0.00066 U	0.00066 U	0.00065 U	0.00065 U
Methylcyclohexane	NE	NE	NE	mg/kg	0.00027 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Methylene chloride	51	12	0.05	mg/kg	0.0012 J	0.0012 J	0.0013 J	0.001 J	0.001 J
tert-Butyl methyl ether (MTBE)	62	NE	0.93	mg/kg	0.00038 U	0.00042 U	0.00043 U	0.00042 U	0.00042 U
Styrene	NE	NE	NE	mg/kg	0.00035 U	0.00039 U	0.00039 U	0.00038 U	0.00038 U
Tetrachloroethene (PCE)	5.5	2	1.3	mg/kg	0.00044 U	0.00049 U	0.00049 U	0.00048 U	0.00048 U
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.00035 U	0.00039 U	0.00039 U	0.00038 U	0.00038 U
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00044 U	0.00049 U	0.00049 U	0.00048 U	0.00048 U
Trichloroethene (TCE)	10	2	0.47	mg/kg	0.00041 U	0.00045 U	0.00045 U	0.00044 U	0.00063 J
Trichlorofluoromethane (Freon 11)	NE	NE	NE	mg/kg	0.00034 U	0.00037 U	0.00038 U	0.00037 U	0.00037 U
Vinyl chloride	0.21	NE	0.02	mg/kg	0.00021 UJ	0.00023 UJ	0.00023 UJ	0.00022 UJ	0.00022 UJ

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-120-10 16-18 11/1/2010	B-121-10 4-6 11/1/2010	B-121-10 8-10 11/1/2010	B-122-10 4-6 11/1/2010	B-122-10 10-12 11/1/2010
Semi-volatile Organic Compounds (SVOCs)									
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	100	20	98	mg/kg	0.018 U	0.02 U	0.02 U	0.02 U	0.02 U
Acenaphthylene	100	NE	107	mg/kg	0.014 U	0.015 U	0.015 U	0.015 U	0.015 U
Anthracene	100	NE	1000	mg/kg	0.022 U	0.024 U	0.024 U	0.024 U	0.024 U
Benzo(a)anthracene	1	NE	1	mg/kg	0.015 U	0.095 J	0.017 U	0.016 U	0.016 U
Benzo(a)pyrene	1	2.6	22	mg/kg	0.028 U	0.11 J	0.031 U	0.031 U	0.031 U
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	0.04 UJ	0.084 J	0.044 UJ	0.043 UJ	0.043 UJ
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	0.022 U	0.069 J	0.024 U	0.024 U	0.024 U
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	0.031 U	0.074 J	0.034 U	0.033 U	0.033 U
Chrysene	1	NE	1	mg/kg	0.025 U	0.11 J	0.028 U	0.027 U	0.027 U
Dibenz(a,h)anthracene	0.33	NE	1000	mg/kg	0.031 U	0.034 U	0.034 U	0.033 U	0.033 U
Fluoranthene	100	NE	1000	mg/kg	0.026 U	0.11 J	0.029 U	0.029 U	0.028 U
Fluorene	100	30	386	mg/kg	0.018 U	0.02 U	0.02 U	0.02 U	0.02 U
Indeno(1,2,3-c,d)pyrene	0.5	NE	8.2	mg/kg	0.024 U	0.067 J	0.026 U	0.026 U	0.026 U
Naphthalene	100	NE	12	mg/kg	0.017 U	0.019 U	0.019 U	0.019 U	0.019 U
Phenanthrene	100	NE	1000	mg/kg	0.021 U	0.023 U	0.023 U	0.022 U	0.022 U
Pyrene	100	NE	1000	mg/kg	0.019 U	0.1 J	0.022 U	0.021 U	0.021 U
2-Methylnaphthalene	NE	NE	NE	mg/kg	0.019 U	0.021 U	0.022 U	0.021 U	0.021 U
Total PAHs	NE	NE	NE	mg/kg	ND	0.819	ND	ND	ND
Other SVOCs									
Biphenyl (Diphenyl)	NE	NE	NE	mg/kg	0.035 U	0.039 U	0.039 U	0.038 U	0.038 U
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	0.04 U	0.044 U	0.044 U	0.043 U	0.043 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	0.027 U	0.03 U	0.03 U	0.03 U	0.03 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	0.023 U	0.025 U	0.025 U	0.025 U	0.025 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	0.025 U	0.028 U	0.028 U	0.027 U	0.027 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	0.99 U	1.1 U	1.1 U	1.1 U	1.1 U
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	0.034 U	0.037 U	0.038 U	0.037 U	0.037 U
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	0.021 U	0.023 U	0.023 U	0.022 U	0.022 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-120-10 16-18 11/1/2010	B-121-10 4-6 11/1/2010	B-121-10 8-10 11/1/2010	B-122-10 4-6 11/1/2010	B-122-10 10-12 11/1/2010
2-Chloronaphthalene	NE	NE	NE	mg/kg	0.017 U	0.019 U	0.019 U	0.019 U	0.019 U
2-Chlorophenol	NE	NE	NE	mg/kg	0.043 U	0.047 U	0.047 U	0.047 U	0.047 U
2-Methylphenol (o-cresol)	100	NE	0.33	mg/kg	0.027 U	0.03 U	0.03 U	0.03 U	0.03 U
2-Nitroaniline	NE	NE	NE	mg/kg	0.58 U	0.64 U	0.64 U	0.63 U	0.63 U
2-Nitrophenol	NE	NE	NE	mg/kg	0.028 U	0.031 U	0.031 U	0.031 U	0.031 U
3,3'-Dichlorobenzidine (3- and -4 Methylphenol coellution)	34	NE	0.33	mg/kg	0.032 U	0.035 U	0.035 U	0.035 U	0.035 U
3-Nitroaniline	NE	NE	NE	mg/kg	0.6 U	0.66 U	0.67 U	0.66 U	0.65 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	0.57 U	0.63 U	0.63 U	0.62 U	0.62 U
4-Bromophenyl phenyl ether	NE	NE	NE	mg/kg	0.017 U	0.019 U	0.019 U	0.019 U	0.019 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.016 U	0.018 U	0.018 U	0.018 U	0.018 U
4-Chloroaniline	NE	NE	NE	mg/kg	0.029 U	0.033 U	0.033 U	0.032 U	0.032 U
4-Chlorophenyl phenyl ether	NE	NE	NE	mg/kg	0.034 U	0.037 U	0.038 U	0.037 U	0.037 U
4-Nitroaniline	NE	NE	NE	mg/kg	0.46 U	0.51 U	0.51 U	0.51 U	0.51 U
4-Nitrophenol	NE	NE	NE	mg/kg	0.58 U	0.64 U	0.64 U	0.63 U	0.63 U
Acetophenone	NE	NE	NE	mg/kg	0.048 U	0.054 U	0.054 U	0.053 U	0.053 U
Atrazine	NE	NE	NE	mg/kg	0.069 UJ	0.076 UJ	0.076 UJ	0.075 UJ	0.075 UJ
Benzaldehyde	NE	NE	NE	mg/kg	0.066 U	0.073 U	0.073 U	0.072 U	0.072 U
2,2-oxybis(1-Chloropropane)	NE	NE	NE	mg/kg	0.045 UJ	0.05 UJ	0.05 UJ	0.049 UJ	0.049 UJ
bis(2-Chloroethoxy)methane	NE	NE	NE	mg/kg	0.035 U	0.039 U	0.039 U	0.038 U	0.038 U
bis(2-Chloroethyl)ether	NE	NE	NE	mg/kg	0.019 U	0.021 U	0.022 U	0.021 U	0.021 U
bis(2-Ethylhexyl)phthalate	NE	NE	NE	mg/kg	0.062 U	0.068 U	0.068 U	0.067 U	0.067 U
Caprolactam	NE	NE	NE	mg/kg	0.043 U	0.047 U	0.047 U	0.047 U	0.047 U
Carbazole	NE	NE	NE	mg/kg	0.061 U	0.067 U	0.067 U	0.066 U	0.066 U
Dibenzofuran	14	NE	210	mg/kg	0.017 U	0.019 U	0.019 U	0.019 U	0.019 U
Benzyl butyl phthalate	NE	NE	NE	mg/kg	0.018 U	0.02 U	0.02 U	0.02 U	0.02 U
Diethyl phthalate	NE	NE	NE	mg/kg	0.025 U	0.028 U	0.028 U	0.027 U	0.027 U
Dimethyl phthalate	NE	NE	NE	mg/kg	0.018 U	0.02 U	0.02 U	0.02 U	0.02 U
dl-n-Butyl phthalate	NE	NE	NE	mg/kg	0.15 U	0.17 U	0.17 J	0.17 U	0.17 U
dl-n-Octyl phthalate	NE	NE	NE	mg/kg	0.031 U	0.034 U	0.034 U	0.033 U	0.033 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	0.022 U	0.024 U	0.024 U	0.024 U	0.024 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-120-10 16-18 11/1/2010	B-121-10 4-6 11/1/2010	B-121-10 8-10 11/1/2010	B-122-10 4-6 11/1/2010	B-122-10 10-12 11/1/2010
Hexachlorobutadiene	NE	NE	NE	mg/kg	0.023 U	0.025 U	0.025 U	0.025 U	0.025 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	0.028 U	0.031 U	0.031 U	0.031 U	0.031 U
Hexachloroethane	NE	NE	NE	mg/kg	0.032 U	0.035 U	0.035 U	0.035 U	0.035 U
Isophorone	NE	NE	NE	mg/kg	0.023 U	0.025 U	0.025 U	0.025 U	0.025 U
Nitrobenzene	NE	NE	NE	mg/kg	0.044 U	0.049 U	0.049 U	0.048 U	0.048 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	0.024 U	0.026 U	0.026 U	0.026 U	0.026 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	0.017 U	0.019 U	0.019 U	0.019 U	0.019 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	0.63 U	0.7 U	0.7 U	0.69 U	0.69 U
Phenol	100	30	0.33	mg/kg	0.025 U	0.028 U	0.028 U	0.027 U	0.027 U
Inorganic Constituents									
Cyanide, total	27	NE	40	mg/kg	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Cyanide, free	NE	NE	NE	mg/kg	0.0159 UJ	0.0187 UJ	0.0177 UJ	0.0182 UJ	0.0186 UJ

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-123-10 4-6 11/2/2010	B-123-10 10-12 11/2/2010	B-124-10 14-16 11/2/2010	B-124-10 17-19 11/2/2010	B-125-10 10-12 11/2/2010	B-125-10 12-14 11/2/2010
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	2.9	70	0.06	mg/kg	0.00032 U	0.00028 U	0.00029 U	0.00027 U	0.00061 U	0.00036 J
Toluene	100	36	0.7	mg/kg	0.00045 U	0.00039 U	0.0004 U	0.00039 U	0.00086 U	0.0004 U
Ethylbenzene	30	NE	1	mg/kg	0.00031 U	0.00027 U	0.33	0.00026 U	0.0028 J	0.00027 U
1,2-Dimethylbenzene (o-Xylene)	NE	NE	NE	mg/kg	0.00044 U	0.00038 U	0.092	0.00038 U	0.00083 U	0.00039 U
m,p-Xylene (sum of isomers)	NE	NE	NE	mg/kg	0.00086 U	0.00075 U	0.1	0.00073 U	0.0017 U	0.00075 U
Xylenes, Total	100	0.26	1.6	mg/kg	ND	ND	0.192	ND	ND	ND
Total BTEX	NE	]	NE	mg/kg	ND	ND	0.522	ND	0.0028	0.00036
Other VOCs										
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.00052 U	0.00045 U	0.00046 U	0.00044 U	0.00098 U	0.00045 U
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.00061 U	0.00053 U	0.00054 U	0.00052 U	0.0012 U	0.00053 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	NE	NE	mg/kg	0.00032 U	0.00028 U	0.00029 U	0.00027 U	0.00061 UJ	0.00028 U
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.00053 U	0.00046 U	0.00047 U	0.00045 U	0.0011 U	0.00047 U
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.0005 U	0.00044 U	0.00045 U	0.00043 U	0.00096 U	0.00044 U
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.00059 U	0.00052 U	0.00053 U	0.00051 U	0.0012 U	0.00052 U
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.00049 U	0.00043 UJ	0.00044 UJ	0.00042 U	0.00093 U	0.00043 UJ
1,2-Dibromo-3-chloropropane (DBCP)	NE	NE	NE	mg/kg	0.00097 U	0.00085 U	0.00087 U	0.00084 U	0.0019 U	0.00086 U
1,2-Dibromoethane (EDB)	NE	NE	NE	mg/kg	0.0004 U	0.00035 U	0.00036 U	0.00034 U	0.00076 U	0.00035 U
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.00035 U	0.0003 U	0.00031 U	0.0003 U	0.00066 U	0.0003 U
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.00052 U	0.00045 U	0.00046 U	0.00044 U	0.00098 U	0.00045 U
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.00044 U	0.00038 U	0.00039 U	0.00038 U	0.00083 U	0.00039 U
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.00057 U	0.0005 U	0.00051 U	0.00049 U	0.0011 U	0.0005 U
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.0004 U	0.00035 U	0.00036 U	0.00034 U	0.00076 U	0.00035 U
2-Butanone (MEK)	100	100	0.12	mg/kg	0.0013 U	0.0011 U	0.0012 U	0.0011 U	0.0043 J	0.0012 U
2-Hexanone	NE	NE	NE	mg/kg	0.00071 U	0.00062 U	0.00064 U	0.00061 U	0.0014 U	0.00063 U
4-Methyl-2-pentanone (MIBK)	NE	NE	NE	mg/kg	0.00074 U	0.00064 U	0.00066 U	0.00063 U	0.0015 U	0.00065 U
Acetone	100	2.2	0.05	mg/kg	0.0033 J	0.0018 U	0.0018 U	0.0017 U	0.022 J	0.0018 U
Bromodichloromethane	NE	NE	NE	mg/kg	0.0005 U	0.00044 U	0.00045 U	0.00043 U	0.00096 U	0.00044 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-123-10 4-6 11/2/2010	B-123-10 10-12 11/2/2010	B-124-10 14-16 11/2/2010	B-124-10 17-19 11/2/2010	B-125-10 10-12 11/2/2010	B-125-10 12-14 11/2/2010
Bromoform	NE	NE	NE	mg/kg	0.00035 U	0.0003 U	0.00031 U	0.0003 U	0.00066 U	0.0003 U
Bromomethane	NE	NE	NE	mg/kg	0.00062 U	0.00054 U	0.00056 U	0.00053 U	0.0012 UJ	0.00055 U
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.00059 U	0.00052 U	0.00053 U	0.00051 U	0.0012 U	0.00052 U
Carbon disulfide	NE	NE	NE	mg/kg	0.00067 U	0.00059 U	0.0006 U	0.00058 U	0.0096 J	0.00059 U
Chlorobenzene	100	40	1.1	mg/kg	0.0005 U	0.00044 U	0.00045 U	0.00043 U	0.00096 U	0.00044 U
Chloroethane	NE	NE	NE	mg/kg	0.00057 U	0.0005 U	0.00051 U	0.00049 U	0.0011 U	0.0005 U
Chloroform	10	12	0.37	mg/kg	0.00059 U	0.00052 U	0.00053 U	0.00051 U	0.0012 U	0.00052 U
Chloromethane	NE	NE	NE	mg/kg	0.00091 U	0.00079 UJ	0.00081 UJ	0.00078 U	0.0018 U	0.0008 UJ
Cyclohexane	NE	NE	NE	mg/kg	0.00056 U	0.00048 U	0.0005 U	0.00048 U	0.0011 U	0.00049 U
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.00058 U	0.00051 U	0.00052 U	0.0005 U	0.0012 U	0.00051 U
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00056 U	0.00048 U	0.0005 U	0.00048 U	0.0011 U	0.00049 U
Dibromochloromethane	NE	NE	NE	mg/kg	0.00042 U	0.00037 U	0.00038 U	0.00036 U	0.00081 U	0.00037 U
Dichlorodifluoromethane (Freon 12)	NE	NE	NE	mg/kg	0.00066 U	0.00058 U	0.00059 U	0.00057 U	0.0013 U	0.00058 U
Isopropylbenzene (Cumene)	NE	NE	NE	mg/kg	0.00032 U	0.00028 U	0.074	0.00027 U	0.0027 J	0.00028 U
Methyl acetate	NE	NE	NE	mg/kg	0.0007 U	0.00061 U	0.00063 U	0.0006 U	0.0014 U	0.00062 U
Methylcyclohexane	NE	NE	NE	mg/kg	0.00032 U	0.00028 U	0.00074 J	0.00027 U	0.00061 U	0.00028 U
Methylene chloride	51	12	0.05	mg/kg	0.0012 J	0.00062 U	0.00064 U	0.00061 U	0.0014 U	0.00063 U
tert-Butyl methyl ether (MTBE)	62	NE	0.93	mg/kg	0.00045 U	0.00039 U	0.0004 U	0.00039 U	0.00086 U	0.0004 U
Styrene	NE	NE	NE	mg/kg	0.00041 U	0.00036 U	0.00037 U	0.00035 U	0.013	0.00036 U
Tetrachloroethene (PCE)	5.5	2	1.3	mg/kg	0.00052 U	0.00045 U	0.00046 U	0.00044 U	0.00098 U	0.00045 U
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.00041 U	0.00036 U	0.00037 U	0.00035 U	0.00078 U	0.00036 U
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.00052 U	0.00045 U	0.00046 U	0.00044 U	0.00098 U	0.00045 U
Trichloroethene (TCE)	10	2	0.47	mg/kg	0.00048 U	0.00042 U	0.00043 U	0.00041 U	0.00091 U	0.00042 U
Trichlorofluoromethane (Freon 11)	NE	NE	NE	mg/kg	0.0004 U	0.00035 U	0.00036 U	0.00034 U	0.00076 U	0.00035 U
Vinyl chloride	0.21	NE	0.02	mg/kg	0.00024 UJ	0.00021 U	0.00022 U	0.00021 U	0.00046 U	0.00021 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-123-10 4-6 11/2/2010	B-123-10 10-12 11/2/2010	B-124-10 14-16 11/2/2010	B-124-10 17-19 11/2/2010	B-125-10 10-12 11/2/2010	B-125-10 12-14 11/2/2010
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	100	20	98	mg/kg	0.021 U	0.019 U	17	0.018 U	11 J	0.019 U
Acenaphthylene	100	NE	107	mg/kg	0.016 U	0.014 U	2.9 J	0.014 U	21	0.014 U
Anthracene	100	NE	1000	mg/kg	0.025 U	0.022 U	10	0.022 U	10 J	0.022 U
Benzo(a)anthracene	1	NE	1	mg/kg	0.018 U	0.015 U	**9.7**	0.015 U	**77**	0.015 U
Benzo(a)pyrene	1	2.6	22	mg/kg	0.033 U	0.029 U	**8.1**	0.029 U	**64**	0.029 U
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	0.046 UJ	0.04 U	**3.3 J**	0.04 UJ	**22 J**	0.041 UJ
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	0.025 U	0.022 U	3.7 J	0.022 U	28	0.022 U
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	0.036 U	0.031 U	**3.8 J**	0.031 U	**27**	0.032 U
Chrysene	1	NE	1	mg/kg	0.029 U	0.026 U	**9.1**	0.025 U	**74**	0.026 U
Dibenz(a,h)anthracene	0.33	NE	1000	mg/kg	0.036 U	0.031 U	**0.89 J**	0.031 U	**6.3 J**	0.032 U
Fluoranthene	100	NE	1000	mg/kg	0.031 U	0.027 U	19	0.026 U	**130**	0.027 U
Fluorene	100	30	386	mg/kg	0.021 U	0.019 U	9.2	0.018 U	16 J	0.019 U
Indeno(1,2,3-c,d)pyrene	0.5	NE	8.2	mg/kg	0.028 U	0.024 U	**2.6 J**	0.024 U	**21 J**	0.025 U
Naphthalene	100	NE	12	mg/kg	0.02 U	0.018 U	**27**	0.017 U	0.94 U	0.018 U
Phenanthrene	100	NE	1000	mg/kg	0.024 U	0.021 U	45	0.021 U	33	0.021 U
Pyrene	100	NE	1000	mg/kg	0.023 U	0.02 U	25	0.02 U	190	0.043 J
2-Methylnaphthalene	NE	NE	NE	mg/kg	0.023 U	0.02 U	16	0.02 U	1.1 U	0.02 U
Total PAHs	NE	NE	NE	mg/kg	ND	ND	212	ND	730	0.043
Other SVOCs										
Biphenyl (Diphenyl)	NE	NE	NE	mg/kg	0.041 U	0.036 U	4.6 J	0.035 U	2.8 J	0.036 U
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	0.046 U	0.04 U	0.54 U	0.04 U	2.2 U	0.041 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	0.032 U	0.028 U	0.37 U	0.027 U	1.6 U	0.028 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	0.027 U	0.023 U	0.31 U	0.023 U	1.3 U	0.024 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	0.029 U	0.026 U	0.34 U	0.025 U	1.4 U	0.026 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	1.2 U	1.1 U	14 U	0.99 U	56 U	1.1 U
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	0.04 UJ	0.035 UJ	0.46 U	0.034 U	1.9 U	0.035 U
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	0.024 U	0.021 U	0.28 U	0.021 U	1.2 U	0.021 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-123-10 4-6 11/2/2010	B-123-10 10-12 11/2/2010	B-124-10 14-16 11/2/2010	B-124-10 17-19 11/2/2010	B-125-10 10-12 11/2/2010	B-125-10 12-14 11/2/2010
2-Chloronaphthalene	NE	NE	NE	mg/kg	0.02 U	0.018 U	0.23 U	0.017 U	0.94 U	0.018 U
2-Chlorophenol	NE	NE	NE	mg/kg	0.05 U	0.044 U	0.58 U	0.043 U	2.4 U	0.044 U
2-Methylphenol (o-cresol)	100	NE	0.33	mg/kg	0.032 U	0.028 U	0.37 U	0.027 U	1.6 U	0.028 U
2-Nitroaniline	NE	NE	NE	mg/kg	0.68 U	0.6 U	7.9 U	0.59 U	33 U	0.6 U
2-Nitrophenol	NE	NE	NE	mg/kg	0.033 U	0.029 U	0.39 U	0.029 U	1.6 U	0.029 U
3,3'-Dichlorobenzidine (3- and -4 Methylphenol coellution)	34	NE	0.33	mg/kg	0.037 U	0.032 U	0.43 U	0.032 U	1.8 U	0.033 U
3-Nitroaniline	NE	NE	NE	mg/kg	0.7 U	0.61 U	8.2 U	0.6 U	34 U	0.62 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	0.67 U	0.59 U	7.8 U	0.58 U	32 U	0.59 U
4-Bromophenyl phenyl ether	NE	NE	NE	mg/kg	0.02 U	0.018 U	0.23 U	0.017 U	0.94 U	0.018 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.019 U	0.016 U	0.22 U	0.016 U	0.88 U	0.017 U
4-Chloroaniline	NE	NE	NE	mg/kg	0.035 U	0.03 U	0.4 U	0.03 U	1.7 U	0.03 U
4-Chlorophenyl phenyl ether	NE	NE	NE	mg/kg	0.04 U	0.035 U	0.46 U	0.034 U	1.9 U	0.035 U
4-Nitroaniline	NE	NE	NE	mg/kg	0.54 U	0.48 U	6.3 U	0.47 U	26 U	0.48 U
4-Nitrophenol	NE	NE	NE	mg/kg	0.68 U	0.59 U	7.9 U	0.58 U	33 U	0.59 U
Acetophenone	NE	NE	NE	mg/kg	0.057 U	0.05 U	0.66 U	0.049 U	2.7 U	0.05 U
Atrazine	NE	NE	NE	mg/kg	0.08 UJ	0.07 U	0.93 UJ	0.069 UJ	3.9 UJ	0.071 UJ
Benzaldehyde	NE	NE	NE	mg/kg	0.078 U	0.068 U	0.9 U	0.067 U	3.7 U	0.068 U
2,2-oxybis(1-Chloropropane)	NE	NE	NE	mg/kg	0.053 UJ	0.046 UJ	0.61 UJ	0.045 UJ	2.6 UJ	0.047 UJ
bis(2-Chloroethoxy)methane	NE	NE	NE	mg/kg	0.041 U	0.036 U	0.48 U	0.035 U	2 U	0.036 U
bis(2-Chloroethyl)ether	NE	NE	NE	mg/kg	0.023 U	0.02 U	0.26 U	0.02 U	1.1 U	0.02 U
bis(2-Ethylhexyl)phthalate	NE	NE	NE	mg/kg	0.073 U	0.063 U	0.84 U	0.062 U	3.5 U	0.064 U
Caprolactam	NE	NE	NE	mg/kg	0.05 U	0.044 U	0.58 U	0.043 U	2.4 U	0.044 U
Carbazole	NE	NE	NE	mg/kg	0.071 U	0.062 U	0.83 U	0.061 U	3.4 U	0.063 U
Dibenzofuran	14	NE	210	mg/kg	0.02 U	0.018 U	1.3 J	0.017 U	3.5 J	0.018 U
Benzyl butyl phthalate	NE	NE	NE	mg/kg	0.021 U	0.019 U	0.25 U	0.018 U	1.1 U	0.019 U
Diethyl phthalate	NE	NE	NE	mg/kg	0.029 U	0.026 U	0.34 U	0.025 U	1.4 U	0.026 U
Dimethyl phthalate	NE	NE	NE	mg/kg	0.021 U	0.019 U	0.25 U	0.018 U	1.1 U	0.019 U
dI-n-Butyl phthalate	NE	NE	NE	mg/kg	0.18 U	0.16 U	2.1 U	0.16 U	8.4 U	0.16 J
dI-n-Octyl phthalate	NE	NE	NE	mg/kg	0.036 U	0.031 U	0.42 U	0.031 U	1.7 U	0.032 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	0.025 U	0.022 U	0.29 U	0.022 U	1.2 U	0.022 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-123-10 4-6 11/2/2010	B-123-10 10-12 11/2/2010	B-124-10 14-16 11/2/2010	B-124-10 17-19 11/2/2010	B-125-10 10-12 11/2/2010	B-125-10 12-14 11/2/2010
Hexachlorobutadiene	NE	NE	NE	mg/kg	0.027 U	0.023 U	0.31 U	0.023 U	1.3 U	0.024 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	0.033 U	0.029 U	0.39 U	0.029 U	1.6 U	0.029 U
Hexachloroethane	NE	NE	NE	mg/kg	0.037 U	0.032 U	0.43 U	0.032 U	1.8 U	0.033 U
Isophorone	NE	NE	NE	mg/kg	0.027 U	0.023 U	0.31 U	0.023 U	1.3 U	0.024 U
Nitrobenzene	NE	NE	NE	mg/kg	0.052 U	0.045 U	0.6 U	0.044 U	2.5 U	0.045 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	0.028 U	0.024 U	0.33 U	0.024 U	1.4 U	0.025 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	0.02 U	0.018 U	0.23 U	0.017 U	0.94 U	0.018 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	0.75 U	0.65 U	8.7 U	0.64 U	36 U	0.66 U
Phenol	100	30	0.33	mg/kg	0.029 U	0.026 U	0.34 U	0.025 U	1.4 U	0.026 U
Inorganic Constituents										
Cyanide, total	27	NE	40	mg/kg	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Cyanide, free	NE	NE	NE	mg/kg	0.0196 UJ	0.0171 UJ	0.0204 UJ	0.0166 UJ	0.0182 UJ	0.0171 UJ

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-127-10 5-7 11/2/2010	B-127-10 10-12 11/2/2010	B-128-10 4-6 11/2/2010	B-128-10 DUP 4-6 11/2/2010	B-128-10 8-10 11/2/2010
Volatile Organic Compounds (VOCs)									
BTEX									
Benzene	2.9	70	0.06	mg/kg	**0.93 J**	**5.6**	**0.48**	**0.26**	**2.1**
Toluene	100	36	0.7	mg/kg	0.14 U	0.16 U	0.0022 U	0.067	0.87 U
Ethylbenzene	30	NE	1	mg/kg	**66**	**110 J**	**20 J**	0.57 J	**40**
1,2-Dimethylbenzene (o-Xylene)	NE	NE	NE	mg/kg	27	38	0.75 J	0.086 J	7.2
m,p-Xylene (sum of isomers)	NE	NE	NE	mg/kg	17	63	0.89 J	2.2	12
Xylenes, Total	100	0.26	1.6	mg/kg	44	101	1.64	2.286	19.2
Total BTEX	NE	]	NE	mg/kg	111	217	22	3.18	61
Other VOCs									
1,1,1-Trichloroethane	100	NE	0.68	mg/kg	0.12 U	0.14 U	0.0025 U	0.0025 U	0.029 U
1,1,2,2-Tetrachloroethane	NE	NE	NE	mg/kg	0.19 U	0.22 U	0.0029 U	0.003 U	0.045 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	NE	NE	mg/kg	0.2 U	0.22 U	0.0016 U	0.0016 UJ	0.047 U
1,1,2-Trichloroethane	NE	NE	NE	mg/kg	0.16 U	0.18 U	0.0026 U	0.0026 U	0.037 U
1,1-Dichloroethane	19	NE	0.27	mg/kg	0.12 U	0.13 U	0.0024 U	0.0025 U	0.028 U
1,1-Dichloroethene	100	NE	0.33	mg/kg	0.2 U	0.22 U	0.0029 U	0.0029 U	0.047 U
1,2,4-Trichlorobenzene	NE	NE	NE	mg/kg	0.13 U	0.15 U	0.0024 U	0.0024 U	0.031 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	NE	NE	mg/kg	0.24 U	0.27 U	0.0047 U	0.0047 U	0.056 U
1,2-Dibromoethane (EDB)	NE	NE	NE	mg/kg	0.12 U	0.14 U	0.0019 U	0.002 U	0.029 U
1,2-Dichlorobenzene	100	NE	1.1	mg/kg	0.1 U	0.12 U	0.0017 U	0.0017 U	0.024 U
1,2-Dichloroethane	2.3	10	0.02	mg/kg	0.087 U	0.098 U	0.0025 U	0.0025 U	0.021 U
1,2-Dichloropropane	NE	NE	NE	mg/kg	0.12 U	0.13 U	0.0021 U	0.0021 U	0.028 U
1,3-Dichlorobenzene	17	NE	2.4	mg/kg	0.1 U	0.12 U	0.0027 U	0.0028 U	0.024 U
1,4-Dichlorobenzene	9.8	20	1.8	mg/kg	0.094 U	0.11 U	0.0019 U	0.002 U	0.023 U
2-Butanone (MEK)	100	100	0.12	mg/kg	0.58 UJ	0.66 UJ	0.0061 U	0.0069 J	0.14 U
2-Hexanone	NE	NE	NE	mg/kg	0.22 UJ	0.25 UJ	0.0034 U	0.0035 U	0.053 U
4-Methyl-2-pentanone (MIBK)	NE	NE	NE	mg/kg	0.1 UJ	0.12 UJ	0.0036 U	0.0036 U	0.024 U
Acetone	100	2.2	0.05	mg/kg	0.47 UJ	0.53 UJ	0.0095 U	0.023 J	**0.14 J**
Bromodichloromethane	NE	NE	NE	mg/kg	0.15 U	0.17 U	0.0024 U	0.0025 U	0.035 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-127-10 5-7 11/2/2010	B-127-10 10-12 11/2/2010	B-128-10 4-6 11/2/2010	B-128-10 DUP 4-6 11/2/2010	B-128-10 8-10 11/2/2010
Bromoform	NE	NE	NE	mg/kg	0.19 U	0.22 U	0.0017 U	0.0017 U	0.045 U
Bromomethane	NE	NE	NE	mg/kg	0.3 UJ	0.34 UJ	0.0031 U	0.003 UJ	0.072 U
Carbon tetrachloride	1.4	NE	0.76	mg/kg	0.19 U	0.22 U	0.0029 U	0.0029 U	0.045 U
Carbon disulfide	NE	NE	NE	mg/kg	0.62 U	0.7 U	0.0053 J	0.0098 J	0.15 U
Chlorobenzene	100	40	1.1	mg/kg	0.074 U	0.083 U	0.0024 U	0.0025 U	0.018 U
Chloroethane	NE	NE	NE	mg/kg	0.26 U	0.3 U	0.0027 U	0.0028 U	0.063 U
Chloroform	10	12	0.37	mg/kg	0.12 U	0.13 U	0.0029 U	0.0029 U	0.028 U
Chloromethane	NE	NE	NE	mg/kg	0.22 U	0.25 U	0.0044 U	0.0044 U	0.051 UJ
Cyclohexane	NE	NE	NE	mg/kg	0.16 U	0.18 U	0.0027 U	0.0027 U	0.037 U
cis-1,2-Dichloroethene	59	NE	0.25	mg/kg	0.12 U	0.14 U	0.0028 U	0.0028 U	0.029 U
cis-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.12 U	0.13 U	0.0027 U	0.0027 U	0.028 U
Dibromochloromethane	NE	NE	NE	mg/kg	0.19 U	0.22 U	0.0021 U	0.0021 U	0.045 U
Dichlorodifluoromethane (Freon 12)	NE	NE	NE	mg/kg	0.21 U	0.24 U	0.0032 U	0.0032 U	0.05 U
Isopropylbenzene (Cumene)	NE	NE	NE	mg/kg	9	11	0.41 J	0.081 J	6.3
Methyl acetate	NE	NE	NE	mg/kg	0.42 U	0.48 U	0.0034 U	0.0034 U	0.11 U
Methylcyclohexane	NE	NE	NE	mg/kg	0.55 J	0.16 J	0.0053 J	0.023 J	0.11 J
Methylene chloride	51	12	0.05	mg/kg	0.14 U	0.16 U	0.0034 U	0.0035 U	0.034 U
tert-Butyl methyl ether (MTBE)	62	NE	0.93	mg/kg	0.087 U	0.098 U	0.0022 U	0.0022 U	0.021 U
Styrene	NE	NE	NE	mg/kg	0.1 U	0.12 U	0.002 U	0.002 U	0.024 U
Tetrachloroethene (PCE)	5.5	2	1.3	mg/kg	0.19 U	0.22 U	0.0025 U	0.0025 U	0.045 U
trans-1,2-Dichloroethene	100	NE	0.19	mg/kg	0.15 U	0.17 U	0.002 U	0.002 U	0.035 U
trans-1,3-Dichloropropene	NE	NE	NE	mg/kg	0.1 U	0.12 U	0.0025 U	0.0025 U	0.024 U
Trichloroethene (TCE)	10	2	0.47	mg/kg	0.2 U	0.23 U	0.0023 U	0.0023 U	0.048 U
Trichlorofluoromethane (Freon 11)	NE	NE	NE	mg/kg	0.1 U	0.12 U	0.0019 U	0.002 U	0.024 UJ
Vinyl chloride	0.21	NE	0.02	mg/kg	0.14 U	0.16 U	0.0012 U	0.0012 U	0.032 U

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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-127-10 5-7 11/2/2010	B-127-10 10-12 11/2/2010	B-128-10 4-6 11/2/2010	B-128-10 DUP 4-6 11/2/2010	B-128-10 8-10 11/2/2010
Semi-volatile Organic Compounds (SVOCs)									
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	100	20	98	mg/kg	**64**	**90**	16 J	3.1 J	**140**
Acenaphthylene	100	NE	107	mg/kg	22 J	12 J	1.6 J	0.077 U	17 J
Anthracene	100	NE	1000	mg/kg	38	45	8.8 J	0.82 J	91
Benzo(a)anthracene	1	NE	1	mg/kg	**26**	**28 J**	**6.9 J**	**1.4 J**	**69**
Benzo(a)pyrene	1	2.6	22	mg/kg	**21 J**	**22 J**	**6.3 J**	**1.6 J**	**61**
Benzo(b)fluoranthene	1	NE	1.7	mg/kg	**7.8 J**	**11 J**	**2.3 J**	0.97 J	**26 J**
Benzo(g,h,i)perylene	100	NE	1000	mg/kg	10 J	9.5 J	2.8 J	1.2 J	28 J
Benzo(k)fluoranthene	1	NE	1.7	mg/kg	**10 J**	**9.7 J**	**2.9 J**	0.97 J	**26 J**
Chrysene	1	NE	1	mg/kg	**25**	**28 J**	**6.5 J**	**1.4 J**	**69**
Dibenz(a,h)anthracene	0.33	NE	1000	mg/kg	1.9 U	3.3 U	**0.76 J**	0.18 U	3.5 U
Fluoranthene	100	NE	1000	mg/kg	44	62	12 J	2 J	**130**
Fluorene	100	30	386	mg/kg	**32**	**41**	6.4 J	1.2 J	**59**
Indeno(1,2,3-c,d)pyrene	0.5	NE	8.2	mg/kg	**6.9 J**	**7.5 J**	**2 J**	**0.89 J**	**20 J**
Naphthalene	100	NE	12	mg/kg	**260**	**300**	**27 J**	4.9 J	**250**
Phenanthrene	100	NE	1000	mg/kg	**130**	**170**	33 J	3.3 J	**320**
Pyrene	100	NE	1000	mg/kg	67	82	18 J	2.4 J	180
2-Methylnaphthalene	NE	NE	NE	mg/kg	12 J	120	17	3.3 J	160
Total PAHs	NE	NE	NE	mg/kg	776	1038	170.3	29.5	1646
Other SVOCs									
Biphenyl (Diphenyl)	NE	NE	NE	mg/kg	17 J	20 J	3.8 J	0.38 J	35 J
2,4,5-Trichlorophenol	NE	NE	NE	mg/kg	2.4 U	4.3 U	0.44 U	0.23 U	4.5 U
2,4,6-Trichlorophenol	NE	NE	NE	mg/kg	1.7 U	2.9 U	0.31 U	0.16 U	3.1 U
2,4-Dichlorophenol	NE	NE	NE	mg/kg	1.4 U	2.5 U	0.26 U	0.13 U	2.6 U
2,4-Dimethylphenol	NE	NE	NE	mg/kg	1.5 U	2.7 U	0.28 U	0.14 U	2.8 U
2,4-Dinitrophenol	NE	NE	NE	mg/kg	59 UJ	110 UJ	12 U	5.6 UJ	120 U
2,4-Dinitrotoluene	NE	NE	NE	mg/kg	2.1 U	3.7 U	0.38 U	0.2 U	3.9 U
2,6-Dinitrotoluene	NE	NE	NE	mg/kg	1.3 U	2.2 U	0.23 U	0.12 U	2.3 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-127-10 5-7 11/2/2010	B-127-10 10-12 11/2/2010	B-128-10 4-6 11/2/2010	B-128-10 DUP 4-6 11/2/2010	B-128-10 8-10 11/2/2010
2-Chloronaphthalene	NE	NE	NE	mg/kg	1.1 U	1.9 U	0.19 U	0.096 U	2 U
2-Chlorophenol	NE	NE	NE	mg/kg	2.6 U	4.6 U	0.48 U	0.25 U	4.9 U
2-Methylphenol (o-cresol)	100	NE	0.33	mg/kg	1.7 U	2.9 U	0.31 U	0.16 U	3.1 U
2-Nitroaniline	NE	NE	NE	mg/kg	35 U	63 U	6.5 U	3.3 U	66 U
2-Nitrophenol	NE	NE	NE	mg/kg	1.7 U	3.1 U	0.32 U	0.16 U	3.2 U
3,3'-Dichlorobenzidine (3- and -4 Methylphenol coellution)	34	NE	0.33	mg/kg	1.9 U	3.4 U	0.36 U	0.18 U	3.6 U
3-Nitroaniline	NE	NE	NE	mg/kg	36 U	65 U	6.8 U	3.4 U	68 U
4,6-Dinitro-2-methylphenol	NE	NE	NE	mg/kg	34 U	62 U	6.4 U	3.3 U	65 U
4-Bromophenyl phenyl ether	NE	NE	NE	mg/kg	1.1 U	1.9 U	0.19 U	0.096 U	2 U
4-Chloro-3-methylphenol	NE	NE	NE	mg/kg	0.94 U	1.7 U	0.18 U	0.089 U	1.8 U
4-Chloroaniline	NE	NE	NE	mg/kg	1.8 U	3.2 U	0.33 U	0.17 U	3.4 U
4-Chlorophenyl phenyl ether	NE	NE	NE	mg/kg	2.1 U	3.7 U	0.38 U	0.2 U	3.9 U
4-Nitroaniline	NE	NE	NE	mg/kg	28 U	50 U	5.2 U	2.7 U	53 U
4-Nitrophenol	NE	NE	NE	mg/kg	35 U	62 U	6.5 U	3.3 UJ	66 U
Acetophenone	NE	NE	NE	mg/kg	2.9 U	5.2 U	0.54 U	0.28 U	5.5 U
Atrazine	NE	NE	NE	mg/kg	4.1 U	7.4 U	0.77 UJ	0.39 U	7.8 UJ
Benzaldehyde	NE	NE	NE	mg/kg	4 U	7.1 U	0.75 U	0.38 U	7.6 U
2,2-oxybis(1-Chloropropane)	NE	NE	NE	mg/kg	2.7 UJ	4.9 UJ	0.51 UJ	0.26 UJ	5.1 UJ
bis(2-Chloroethoxy)methane	NE	NE	NE	mg/kg	2.1 U	3.8 U	0.39 U	0.2 U	4 U
bis(2-Chloroethyl)ether	NE	NE	NE	mg/kg	1.2 U	2.1 U	0.22 U	0.11 U	2.2 U
bis(2-Ethylhexyl)phthalate	NE	NE	NE	mg/kg	3.7 U	6.7 U	0.7 U	0.35 U	7 U
Caprolactam	NE	NE	NE	mg/kg	2.6 U	4.6 U	0.48 U	0.25 U	4.9 U
Carbazole	NE	NE	NE	mg/kg	3.7 U	6.5 U	0.68 U	0.35 U	6.9 U
Dibenzofuran	14	NE	210	mg/kg	4.3 J	7.3 J	0.9 J	0.096 U	8.5 J
Benzyl butyl phthalate	NE	NE	NE	mg/kg	1.1 U	2 U	0.21 U	0.11 U	2.1 U
Diethyl phthalate	NE	NE	NE	mg/kg	1.5 U	2.7 U	0.28 U	0.14 U	2.8 U
Dimethyl phthalate	NE	NE	NE	mg/kg	1.1 U	2 U	0.21 U	0.11 U	2.1 U
dl-n-Butyl phthalate	NE	NE	NE	mg/kg	9 U	17 U	1.7 U	0.86 U	18 U
dl-n-Octyl phthalate	NE	NE	NE	mg/kg	1.9 U	3.3 U	0.34 U	0.18 U	3.5 U
Hexachlorobenzene	0.33	NE	3.2	mg/kg	1.3 U	2.3 U	0.24 U	0.13 U	2.5 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-127-10 5-7 11/2/2010	B-127-10 10-12 11/2/2010	B-128-10 4-6 11/2/2010	B-128-10 DUP 4-6 11/2/2010	B-128-10 8-10 11/2/2010
Hexachlorobutadiene	NE	NE	NE	mg/kg	1.4 U	2.5 U	0.26 U	0.13 U	2.6 U
Hexachlorocyclopentadiene	NE	NE	NE	mg/kg	1.7 U	3.1 U	0.32 U	0.16 U	3.2 U
Hexachloroethane	NE	NE	NE	mg/kg	1.9 U	3.4 U	0.36 U	0.18 U	3.6 U
Isophorone	NE	NE	NE	mg/kg	1.4 U	2.5 U	0.26 U	0.13 U	2.6 U
Nitrobenzene	NE	NE	NE	mg/kg	2.7 U	4.7 U	0.49 U	0.25 U	5 U
N-Nitroso-di-n-propylamine	NE	NE	NE	mg/kg	1.5 U	2.6 U	0.27 U	0.14 U	2.7 U
N-Nitrosodiphenylamine	NE	NE	NE	mg/kg	1.1 U	1.9 U	0.19 U	0.096 U	2 U
Pentachlorophenol	2.4	0.8	0.8	mg/kg	38 U	68 U	7.1 U	3.6 U	72 U
Phenol	100	30	0.33	mg/kg	1.5 U	2.7 U	0.28 U	0.14 U	2.8 U
Inorganic Constituents									
Cyanide, total	27	NE	40	mg/kg	2.91	0.23	0.32	0.65	14.1
Cyanide, free	NE	NE	NE	mg/kg	0.462 J	0.0175 UJ	0.0181 UJ	0.0175 UJ	0.0582 J

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.

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
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.
	7.8-8.0	Saturated with groundwater and red-brown NAPL, strong tar-like odor.
	8.0-9.3	Strong tar-like odor.

TABLE 6
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
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.
B-118-10		No observations or odor indicative of MGP-related materials.
B-119-10		No observations or odor indicative of MGP-related materials.
B-120-10	12-13.8	Sporadic NAPL blebs coating coarse-grained soils (sand and gravel), sheen, moderate tar-like odor
B-121-10		No observations or odor indicative of MGP-related materials.
B-122-10		No observations or odor indicative of MGP-related materials.
B-123-10		No observations or odor indicative of MGP-related materials.
B-124-10	12-14	Sporadic occureence of NAPL blebs and sheen within soil.
	15.5-16	NAPL coating coarse sand and gravel, strong tar-like odor.
B-125-10	10.6-12	NAPL coating coarse sand and gravel, strong tar-like odor.
B-127-10	5.6-12.4	Fill materials saturated with groundwater and NAPL, strong tar-like odor.
B-128-10	4.7-5.3	Fill materials saturated with groundwater and NAPL, strong tar-like odor.
	8-9	Fill materials saturated with groundwater and NAPL, strong tar-like odor.
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.

TABLE 6
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-102R-10	13-23	NAPL coating bottom 10' of hollow-stem augers, strong tar-like odor.
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.
MW-104R-10	9.6-10	NAPL coating coarse-grained layers of sand and gravel within glacial till unit. Moderate to strong tar-like odor
	10-10.5	Moderate tar-like odor.
		No impacts observed in bedrock core samples
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-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-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-106R-10	11-15	NAPL coating outside of augers.
	15-27	NAPL observed sporadically on outside of augers.
	36.5	Sheen and tar-like odor observed in return water during coring process
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.

TABLE 6
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-108R-10	35-37	Faint tar-like odor observed from base of overburden soils.
	49.8	Small spot of sheen with tar-like odor observed on outside of core.
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-110R-10		No observations or odor indicative of MGP-related materials encountered in overburden soils or bedrock core samp
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.
MW-112-10		continuous sampling not conducted.
MW-112R-10		No observations or odor indicative of MGP-related materials encountered in overburden soils or bedrock core samp
MW-113R-10	4.7	Slight to moderate tar-like and petroleum-like odor.
	5.2	Black staining with slight to moderate petroleum-like and tar-like odor
	6-8	Sporadic black staining with slight petroleum-like and tar-like odor
	8-8.9	Sporadic blebs of NAPL and NAPL coating larger sand and gravel grains throughout, strong tar-like odor.
		No observations or odor indicative of MGP-related materials encountered in bedrock core samples.
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.

TABLE 6
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
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 7
GROUNDWATER ANALYTICAL RESULTS
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 11/17/2010	MW-101-05 3/30/2011	MW-102-05 3/31/2011	MW-102R-10 11/18/2010	MW-102R-10 3/31/2011	MW-103-05 11/17/2010	MW-103-05 3/30/2011
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	NE	1	µg/L	0.31 U	0.31 U	**340**	**2700**	**540**	**5.1**	**1.7**
Toluene	NE	5	µg/L	0.21 U	0.3 U	**45**	**3500**	**1300**	0.28 UJ	0.3 U
Ethylbenzene	NE	5	µg/L	0.42 U	0.42 U	**430**	**830**	**260**	**5.6**	2
1,2-Dimethylbenzene (o-Xylene)	NE	5	µg/L	0.4 U	0.4 U	**160**	**620**	**330**	2.6	0.69 J
m,p-Xylene (sum of isomers)	NE	5	µg/L	0.81 U	0.81 U	**180**	**1200**	**480**	0.81 U	0.81 U
Total BTEX	NE	NE	µg/L	ND	ND	1155	8850	2910	13.3	4.4
Other VOCs										
1,1,1-Trichloroethane	NE	5	µg/L	0.16 U	0.3 U	1.2 U	0.16 U	3 U	0.16 U	0.3 U
1,1,2,2-Tetrachloroethane	NE	5	µg/L	0.2 U	0.3 U	1.2 U	0.2 U	3 U	0.2 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	5	µg/L	0.4 U	0.4 U	1.6 U	0.4 U	4 U	0.4 U	0.4 U
1,1,2-Trichloroethane	NE	1	µg/L	0.28 U	0.3 U	1.2 U	0.28 U	3 U	0.28 U	0.3 U
1,1-Dichloroethane	NE	5	µg/L	0.13 U	0.3 U	1.2 U	0.13 U	3 U	0.13 U	0.3 U
1,1-Dichloroethene	NE	5	µg/L	0.37 U	0.37 U	1.5 U	0.37 U	3.7 U	0.37 U	0.37 U
1,2,4-Trichlorobenzene	NE	5	µg/L	0.26 U	0.3 U	1.2 U	0.26 U	3 U	0.26 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	0.04	µg/L	0.43 U	0.43 U	1.8 U	0.43 U	4.3 U	0.43 U	0.43 U
1,2-Dibromoethane (EDB)	NE	0.0006	µg/L	0.26 U	0.3 U	1.2 U	0.26 U	3 U	0.26 U	0.3 U
1,2-Dichlorobenzene	NE	3	µg/L	0.4 U	0.4 U	1.6 U	0.4 U	4 U	0.49 J	0.4 U
1,2-Dichloroethane	NE	0.6	µg/L	0.15 U	0.3 U	1.2 U	0.15 U	3 U	0.15 U	0.3 U
1,2-Dichloropropane	NE	1	µg/L	0.66 U	0.66 U	2.7 U	0.66 U	6.7 U	0.66 U	0.66 U
1,3-Dichlorobenzene	NE	3	µg/L	0.36 U	0.36 U	1.5 U	0.36 U	3.6 U	0.36 U	0.36 U
1,4-Dichlorobenzene	NE	3	µg/L	0.34 U	0.34 U	1.4 U	0.34 U	3.5 U	0.34 U	0.34 U
2-Butanone (MEK)	50	NE	µg/L	1 U	1 U	4 U	1 U	10 U	1 U	1 U
2-Hexanone	50	NE	µg/L	0.4 U	0.4 U	1.6 U	0.4 U	4 U	0.4 U	0.4 U
4-Methyl-2-pentanone (MIBK)	NE	NE	µg/L	0.34 U	0.34 U	1.4 U	0.34 U	3.5 U	0.34 U	0.34 U
Acetone	50	NE	µg/L	1.6 U	1.6 U	6.4 U	1.6 U	16 U	1.6 U	1.6 U
Bromodichloromethane	50	NE	µg/L	0.41 U	0.41 U	1.7 U	0.41 U	4.1 U	0.41 U	0.41 U
Bromoform	50	NE	µg/L	0.3 U	0.3 U	1.2 U	0.3 U	3 U	0.3 U	0.3 U
Bromomethane	NE	5	µg/L	0.4 U	0.4 U	1.6 U	0.4 U	4 U	0.4 U	0.4 U
Carbon tetrachloride	NE	5	µg/L	0.36 U	0.36 U	1.5 U	0.36 U	3.6 U	0.36 U	0.36 U
Carbon disulfide	NE	60	µg/L	0.35 U	0.35 U	1.4 U	2.4	3.5 U	0.35 U	0.35 U
Chlorobenzene	NE	5	µg/L	0.26 U	0.3 U	1.2 U	0.26 U	3 U	0.99 J	0.36 J
Chloroethane	NE	5	µg/L	0.25 U	0.3 U	1.2 U	0.25 U	3 U	0.25 U	0.3 U
Chloroform	NE	7	µg/L	0.2 U	0.3 U	1.2 U	3.6	3 U	0.2 U	0.3 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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 11/17/2010	MW-101-05 3/30/2011	MW-102-05 3/31/2011	MW-102R-10 11/18/2010	MW-102R-10 3/31/2011	MW-103-05 11/17/2010	MW-103-05 3/30/2011
Chloromethane	NE	5	µg/L	0.46 U	0.46 U	1.9 U	0.46 U	4.7 U	0.46 U	0.46 U
Cyclohexane	NE	NE	µg/L	0.17 U	0.3 U	53	0.17 U	3 U	0.17 U	0.3 U
cis-1,2-Dichloroethene	NE	5	µg/L	0.22 U	0.3 U	1.2 U	0.22 U	3 U	0.22 U	0.3 U
cis-1,3-Dichloropropene	NE	0.4	µg/L	0.18 U	0.3 U	1.2 U	0.18 U	3 U	0.18 U	0.3 U
Dibromochloromethane	50	50	µg/L	0.2 U	0.3 U	1.2 U	0.2 U	3 U	0.2 U	0.3 U
Dichlorodifluoromethane (Freon 12)	NE	5	µg/L	0.73 U	0.73 U	3 U	0.73 U	7.3 U	0.73 U	0.73 U
Isopropylbenzene (Cumene)	NE	5	µg/L	0.34 U	0.34 U	**45**	**24**	**11**	2.6	1.1
Methyl acetate	NE	NE	µg/L	0.66 U	0.66 U	2.7 U	0.66 U	6.7 U	0.66 U	0.66 U
Methylcyclohexane	NE	NE	µg/L	0.19 U	0.3 U	38	0.45 J	3 U	0.19 U	0.3 U
Methylene chloride	NE	5	µg/L	0.27 U	0.3 U	1.2 U	0.27 U	3 U	0.27 U	0.3 U
tert-Butyl methyl ether (MTBE)	10	NE	µg/L	0.13 U	0.3 U	1.2 U	0.13 U	3 U	0.13 U	0.3 U
Styrene	NE	5	µg/L	0.35 U	0.35 U	1.7 J	**520**	**150**	0.35 U	0.35 U
Tetrachloroethene (PCE)	NE	5	µg/L	0.42 U	0.42 U	1.7 U	0.42 U	4.2 U	0.42 U	0.42 U
trans-1,2-Dichloroethene	NE	5	µg/L	0.16 U	0.3 U	1.2 U	0.16 U	3 U	0.16 U	0.3 U
trans-1,3-Dichloropropene	NE	0.4	µg/L	0.17 U	0.3 U	1.2 U	0.17 U	3 U	0.17 U	0.3 U
Trichloroethene (TCE)	NE	5	µg/L	0.19 U	0.3 U	1.2 U	0.19 U	3 U	0.19 U	0.3 U
Trichlorofluoromethane (Freon 11)	NE	5	µg/L	0.22 U	0.3 U	1.2 U	0.22 U	3 U	0.22 U	0.3 U
Vinyl chloride	NE	2	µg/L	0.28 U	0.3 U	1.2 U	0.28 U	3 U	0.28 U	0.3 U
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	20	NE	µg/L	1.3 U	1.2 U	**85 J**	14	9.7 J	17	14
Acenaphthylene	NE	NE	µg/L	1.1 U	0.97 U	12 U	67	41	7.4 J	4.2 J
Anthracene	50	NE	µg/L	0.64 U	0.6 U	7.2 U	4.4 J	2.9 J	1.7 J	0.6 U
Benzo(a)anthracene	0.002	NE	µg/L	0.77 U	0.73 U	8.8 U	0.76 U	0.73 U	0.73 U	0.73 U
Benzo(a)pyrene	NE	0	µg/L	0.53 U	0.5 U	6 U	0.52 U	0.5 U	0.5 U	0.5 U
Benzo(b)fluoranthene	0.002	NE	µg/L	0.79 U	0.75 U	9 U	0.78 U	0.75 U	0.75 U	0.75 U
Benzo(g,h,i)perylene	NE	NE	µg/L	0.84 U	0.79 U	9.5 U	0.82 U	0.79 U	0.79 U	0.79 U
Benzo(k)fluoranthene	0.002	NE	µg/L	1.2 U	1.1 U	13 U	1.2 U	1.1 U	1.1 U	1.1 U
Chrysene	0.002	NE	µg/L	1.2 U	1.2 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U
Dibenz(a,h)anthracene	NE	NE	µg/L	0.87 U	0.82 U	9.9 U	0.85 U	0.82 U	0.82 U	0.82 U
Fluoranthene	50	NE	µg/L	1.1 U	0.98 U	12 U	2.9 J	2.3 J	1.3 J	0.98 U
Fluorene	50	NE	µg/L	1.2 U	1.1 U	30 J	14	8.5 J	1.1 U	1.3 J
Indeno(1,2,3-c,d)pyrene	0.002	NE	µg/L	0.82 U	0.77 U	9.3 U	0.8 U	0.77 U	0.77 U	0.77 U
Naphthalene	10	NE	µg/L	1.1 U	1.1 U	**1700**	**2200**	**800**	2.4 J	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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 11/17/2010	MW-101-05 3/30/2011	MW-102-05 3/31/2011	MW-102R-10 11/18/2010	MW-102R-10 3/31/2011	MW-103-05 11/17/2010	MW-103-05 3/30/2011
Phenanthrene	50	NE	µg/L	0.9 U	0.85 U	**57 J**	25	14	7.7 J	2.1 J
Pyrene	50	NE	µg/L	0.9 U	0.85 U	14 J	3.5 J	3.9 J	1.7 J	0.85 U
2-Methylnaphthalene	NE	4.7	µg/L	1.1 U	0.99 U	**280**	**190**	**80**	0.99 U	0.99 U
Total PAHs	NE	NE	µg/L	ND	ND	2166	2521	962	39	22
Other SVOCs										
Biphenyl (Diphenyl)	NE	5	µg/L	1.1 U	1.1 U	**27 J**	**15**	**6.3 J**	**5.3 J**	1.6 J
2,4,5-Trichlorophenol	NE	1	µg/L	1.3 U	1.2 U	15 U	1.3 U	1.2 U	1.2 U	1.2 U
2,4,6-Trichlorophenol	NE	1	µg/L	1.2 U	1.1 U	13 U	1.2 U	1.1 U	1.1 U	1.1 U
2,2-oxybis(1-Chloropropane)	NE	5	µg/L	1.5 U	1.4 U	17 U	1.5 U	1.4 U	1.4 U	1.4 U
2,4-Dichlorophenol	NE	1	µg/L	0.96 U	0.91 U	11 U	0.94 U	0.91 U	0.91 U	0.91 U
2,4-Dimethylphenol	NE	50	µg/L	1.7 U	1.6 U	19 U	10	22	1.6 U	1.6 U
2,4-Dinitrophenol	10	NE	µg/L	36 U	34 U	410 U	35 U	34 U	34 U	34 U
2,4-Dinitrotoluene	NE	5	µg/L	1.2 U	1.2 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U
2,6-Dinitrotoluene	NE	5	µg/L	1.4 U	1.3 U	16 U	1.4 U	1.3 U	1.3 U	1.3 U
2-Chloronaphthalene	NE	10	µg/L	1.1 U	0.97 U	12 U	1 U	0.97 U	0.97 U	0.97 U
2-Chlorophenol	NE	1	µg/L	1.4 U	1.3 U	16 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Methylphenol (o-cresol)	NE	1	µg/L	0.78 U	0.74 U	8.9 U	**120**	**85**	0.74 U	0.74 U
2-Nitroaniline	NE	5	µg/L	15 U	14 U	170 U	14 U	14 U	14 U	14 U
2-Nitrophenol	NE	1	µg/L	1.2 U	1.2 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U
3,3'-Dichlorobenzidine	NE	5	µg/L	1.6 U	1.5 U	18 U	1.6 U	1.5 U	1.5 U	1.5 U
3-Nitroaniline	NE	5	µg/L	12 U	12 U	140 U	12 U	12 U	12 U	12 U
4,6-Dinitro-2-methylphenol	NE	1	µg/L	24 U	22 U	270 U	23 UJ	22 U	22 U	22 U
4-Bromophenyl phenyl ether	NE	5	µg/L	0.89 U	0.84 U	11 U	0.87 U	0.84 U	0.84 U	0.84 U
4-Chloro-3-methylphenol	NE	1	µg/L	0.8 U	0.76 U	9.2 U	0.79 U	0.76 U	0.76 U	0.76 U
4-Chloroaniline	NE	5	µg/L	1.7 U	1.6 U	19 U	1.6 U	1.6 U	1.6 U	1.6 U
4-Chlorophenyl phenyl ether	NE	5	µg/L	0.77 U	0.73 U	8.8 U	0.76 U	0.73 U	0.73 U	0.73 U
4-Nitroaniline	NE	5	µg/L	12 U	11 U	130 U	11 U	11 U	11 U	11 U
4-Nitrophenol	NE	1	µg/L	9.9 U	9.4 U	120 U	9.7 U	9.4 U	9.4 U	9.4 U
Acetophenone	NE	NE	µg/L	2.2 U	2.1 U	25 U	2.2 U	3.1 J	2.1 U	2.1 U
Atrazine	NE	7.5	µg/L	2.3 U	2.2 U	27 U	2.3 U	2.2 U	2.2 U	2.2 U
Benzaldehyde	NE	NE	µg/L	3.6 U	3.4 UJ	50 J	3.6 UJ	3.4 UJ	3.4 U	3.4 UJ
bis(2-Chloroethoxy)methane	NE	5	µg/L	1.1 U	1 U	12 U	1.1 U	1 U	1 U	1 U
bis(2-Chloroethyl)ether	NE	1	µg/L	1.3 U	1.3 U	15 U	1.3 U	1.3 U	1.3 U	1.3 U
bis(2-Ethylhexyl)phthalate	NE	5	µg/L	1.3 U	1.2 U	14 U	3.7 J	1.2 U	1.2 U	1.2 U
Caprolactam	NE	NE	µg/L	1.1 U	1.1 U	13 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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 11/17/2010	MW-101-05 3/30/2011	MW-102-05 3/31/2011	MW-102R-10 11/18/2010	MW-102R-10 3/31/2011	MW-103-05 11/17/2010	MW-103-05 3/30/2011
Carbazole	5	NE	µg/L	1 U	0.95 U	12 U	**8.5 J**	**5.1 J**	3.5 J	1.2 J
Dibenzofuran	5	NE	µg/L	1.1 U	0.96 U	12 U	2.2 J	1.3 J	2.9 J	1.2 J
Benzyl butyl phthalate	50	NE	µg/L	0.92 U	0.87 U	11 U	0.9 U	0.87 U	0.87 U	0.87 U
Dimethyl phthalate	50	NE	µg/L	0.69 U	0.65 U	7.9 U	0.68 U	0.65 U	0.65 U	0.65 U
dI-n-Octyl phthalate	50	NE	µg/L	1.2 U	1.1 U	13 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobenzene	NE	0.04	µg/L	1.2 U	1.1 U	13 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobutadiene	NE	0.5	µg/L	1.3 U	1.3 U	15 U	1.3 U	1.3 U	1.3 U	1.3 U
Hexachlorocyclopentadiene	NE	5	µg/L	2.1 U	2 U	24 U	2.1 UJ	2 U	2 U	2 U
Hexachloroethane	NE	5	µg/L	1.4 U	1.3 U	16 U	1.4 U	1.3 U	1.3 U	1.3 U
Isophorone	50	NE	µg/L	1.5 U	1.4 U	17 U	1.5 U	1.4 U	1.4 U	1.4 U
Nitrobenzene	NE	0.4	µg/L	1.4 U	1.3 U	16 U	1.4 U	1.3 U	1.3 U	1.3 U
N-Nitroso-di-n-propylamine	5	NE	µg/L	1.6 U	1.6 U	19 U	1.6 U	1.6 U	1.6 U	1.6 U
N-Nitrosodiphenylamine	50		µg/L	1.3 U	1.2 U	14 U	1.2 U	1.2 U	1.2 U	1.2 U
Pentachlorophenol	NE	1	µg/L	24 U	23 U	270 U	23 U	23 U	23 U	23 U
Phenol	NE	1	µg/L	0.43 U	0.4 U	4.9 U	**160**	**130**	0.4 U	0.4 U
Inorganic Constituents										
Cyanide, total	NE	200	µg/L	**228**	**217**	54	3 U	6 U	125	109
Cyanide, free	NE	NE	µg/L	7 J	4 J	3.4 U	3.4 U	4 J	7 J	3.4 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-104-08 11/16/2010	MW-104-08 3/30/2011	MW-104-08 DUP 3/30/2011	MW-104R-10 11/18/2010	MW-104R-10 3/30/2011	MW-105-08 11/19/2010
Volatile Organic Compounds (VOCs)									
BTEX									
Benzene	NE	1	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.4 J
Toluene	NE	5	µg/L	0.21 U	0.3 U	0.3 U	0.21 U	0.3 U	0.21 U
Ethylbenzene	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.75 J
1,2-Dimethylbenzene (o-Xylene)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.87 J
m,p-Xylene (sum of isomers)	NE	5	µg/L	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Total BTEX	NE	NE	µg/L	ND	ND	ND	ND	ND	2.0
Other VOCs									
1,1,1-Trichloroethane	NE	5	µg/L	0.16 U	0.3 U	0.3 U	0.16 U	0.3 U	0.16 U
1,1,2,2-Tetrachloroethane	NE	5	µg/L	0.2 U	0.3 U	0.3 U	0.2 U	0.3 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1,2-Trichloroethane	NE	1	µg/L	0.28 U	0.3 U	0.3 U	0.28 U	0.3 U	0.28 U
1,1-Dichloroethane	NE	5	µg/L	0.13 U	0.3 U	0.3 U	0.13 U	0.3 U	0.13 U
1,1-Dichloroethene	NE	5	µg/L	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trichlorobenzene	NE	5	µg/L	0.26 U	0.3 U	0.3 U	0.26 U	0.3 U	0.26 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	0.04	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dibromoethane (EDB)	NE	0.0006	µg/L	0.26 U	0.3 U	0.3 U	0.26 U	0.3 U	0.26 U
1,2-Dichlorobenzene	NE	3	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	NE	0.6	µg/L	0.15 U	0.3 U	0.3 U	0.15 U	0.3 U	0.15 U
1,2-Dichloropropane	NE	1	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
1,3-Dichlorobenzene	NE	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dichlorobenzene	NE	3	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Butanone (MEK)	50	NE	µg/L	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	50	NE	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone (MIBK)	NE	NE	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Acetone	50	NE	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromodichloromethane	50	NE	µg/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Bromoform	50	NE	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon tetrachloride	NE	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Carbon disulfide	NE	60	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.97 J	0.35 U
Chlorobenzene	NE	5	µg/L	0.26 U	0.3 U	0.3 U	0.26 U	0.3 U	0.26 U
Chloroethane	NE	5	µg/L	0.25 U	0.3 U	0.3 U	0.25 U	0.3 U	0.25 U
Chloroform	NE	7	µg/L	0.2 U	0.3 U	0.3 U	0.4 J	0.31 J	0.2 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-104-08 11/16/2010	MW-104-08 3/30/2011	MW-104-08 DUP 3/30/2011	MW-104R-10 11/18/2010	MW-104R-10 3/30/2011	MW-105-08 11/19/2010
Chloromethane	NE	5	µg/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	NE	NE	µg/L	0.17 U	0.3 U	0.3 U	0.17 U	0.3 U	0.17 U
cis-1,2-Dichloroethene	NE	5	µg/L	0.22 U	0.3 U	0.3 U	0.22 U	0.3 U	0.22 U
cis-1,3-Dichloropropene	NE	0.4	µg/L	0.18 U	0.3 U	0.3 U	0.18 U	0.3 U	0.18 U
Dibromochloromethane	50	50	µg/L	0.2 U	0.3 U	0.3 U	0.2 U	0.3 U	0.2 U
Dichlorodifluoromethane (Freon 12)	NE	5	µg/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Isopropylbenzene (Cumene)	NE	5	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.98 J
Methyl acetate	NE	NE	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Methylcyclohexane	NE	NE	µg/L	0.19 U	0.3 U	0.3 U	0.19 U	0.3 U	0.19 U
Methylene chloride	NE	5	µg/L	0.27 U	0.3 U	0.3 U	0.27 U	0.3 U	0.27 U
tert-Butyl methyl ether (MTBE)	10	NE	µg/L	0.13 U	0.3 U	0.3 U	0.13 U	0.3 U	0.13 U
Styrene	NE	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tetrachloroethene (PCE)	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
trans-1,2-Dichloroethene	NE	5	µg/L	0.16 U	0.3 U	0.3 U	0.16 U	0.3 U	0.16 U
trans-1,3-Dichloropropene	NE	0.4	µg/L	0.17 U	0.3 U	0.3 U	0.17 U	0.3 U	0.17 U
Trichloroethene (TCE)	NE	5	µg/L	0.19 U	0.3 U	0.3 U	0.19 U	0.3 U	0.19 U
Trichlorofluoromethane (Freon 11)	NE	5	µg/L	0.22 U	0.3 U	0.3 U	0.22 U	0.3 U	0.22 U
Vinyl chloride	NE	2	µg/L	0.28 U	0.3 U	0.3 U	0.28 U	0.3 U	0.28 U
Semi-volatile Organic Compounds (SVOCs)									
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	20	NE	µg/L	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	**40**
Acenaphthylene	NE	NE	µg/L	0.97 U	0.97 U	0.97 U	1.1 U	0.97 U	9.1 J
Anthracene	50	NE	µg/L	0.6 U	0.6 U	0.6 U	0.63 U	0.6 U	3.7 J
Benzo(a)anthracene	0.002	NE	µg/L	0.73 U	0.73 U	0.73 U	0.77 U	0.73 U	0.86 U
Benzo(a)pyrene	NE	0	µg/L	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.59 U
Benzo(b)fluoranthene	0.002	NE	µg/L	0.75 U	0.75 U	0.75 U	0.79 U	0.75 U	0.89 U
Benzo(g,h,i)perylene	NE	NE	µg/L	0.79 U	0.79 U	0.79 U	0.83 U	0.79 U	0.93 U
Benzo(k)fluoranthene	0.002	NE	µg/L	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.3 U
Chrysene	0.002	NE	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.4 U
Dibenz(a,h)anthracene	NE	NE	µg/L	0.82 U	0.82 U	0.82 U	0.86 U	0.82 U	0.97 U
Fluoranthene	50	NE	µg/L	0.98 U	0.98 U	0.98 U	1.1 U	0.98 U	3.5 J
Fluorene	50	NE	µg/L	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	3.3 J
Indeno(1,2,3-c,d)pyrene	0.002	NE	µg/L	0.77 U	0.77 U	0.77 U	0.81 U	0.77 U	0.91 U
Naphthalene	10	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.6 J

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-104-08 11/16/2010	MW-104-08 3/30/2011	MW-104-08 DUP 3/30/2011	MW-104R-10 11/18/2010	MW-104R-10 3/30/2011	MW-105-08 11/19/2010
Phenanthrene	50	NE	µg/L	0.85 U	0.85 U	0.85 U	0.89 U	0.85 U	17
Pyrene	50	NE	µg/L	0.85 U	0.85 U	0.85 U	0.89 U	0.85 U	4 J
2-Methylnaphthalene	NE	4.7	µg/L	0.99 U	0.99 U	0.99 U	1.1 U	0.99 U	1.2 U
Total PAHs	NE	NE	µg/L	ND	ND	ND	ND	ND	82
Other SVOCs									
Biphenyl (Diphenyl)	NE	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U
2,4,5-Trichlorophenol	NE	1	µg/L	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.5 U
2,4,6-Trichlorophenol	NE	1	µg/L	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.3 U
2,2-oxybis(1-Chloropropane)	NE	5	µg/L	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.7 U
2,4-Dichlorophenol	NE	1	µg/L	0.91 U	0.91 U	0.91 U	0.95 U	0.91 U	1.1 U
2,4-Dimethylphenol	NE	50	µg/L	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
2,4-Dinitrophenol	10	NE	µg/L	34 U	34 U	34 U	36 U	34 U	40 U
2,4-Dinitrotoluene	NE	5	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.4 U
2,6-Dinitrotoluene	NE	5	µg/L	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.6 U
2-Chloronaphthalene	NE	10	µg/L	0.97 U	0.97 U	0.97 U	1.1 U	0.97 U	1.2 U
2-Chlorophenol	NE	1	µg/L	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.5 U
2-Methylphenol (o-cresol)	NE	1	µg/L	0.74 U	0.74 U	0.74 U	0.78 U	0.74 U	0.88 U
2-Nitroaniline	NE	5	µg/L	14 U	14 U	14 U	15 U	14 U	16 U
2-Nitrophenol	NE	1	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.4 U
3,3'-Dichlorobenzidine	NE	5	µg/L	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U
3-Nitroaniline	NE	5	µg/L	12 U	12 U	12 U	12 U	12 U	14 U
4,6-Dinitro-2-methylphenol	NE	1	µg/L	22 U	22 U	22 U	23 U	22 U	26 UJ
4-Bromophenyl phenyl ether	NE	5	µg/L	0.84 U	0.84 U	0.84 U	0.88 U	0.84 U	0.99 U
4-Chloro-3-methylphenol	NE	1	µg/L	0.76 U	0.76 U	0.76 U	0.8 U	0.76 U	0.9 U
4-Chloroaniline	NE	5	µg/L	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U
4-Chlorophenyl phenyl ether	NE	5	µg/L	0.73 U	0.73 U	0.73 U	0.77 U	0.73 U	0.86 U
4-Nitroaniline	NE	5	µg/L	11 U	11 U	11 U	12 U	11 U	13 U
4-Nitrophenol	NE	1	µg/L	9.4 U	9.4 U	9.4 U	9.8 U	9.4 U	11 U
Acetophenone	NE	NE	µg/L	2.1 U	2.1 U	2.1 U	2.2 U	2.1 U	2.5 U
Atrazine	NE	7.5	µg/L	2.2 U	2.2 U	2.2 U	2.3 U	2.2 U	2.6 U
Benzaldehyde	NE	NE	µg/L	3.4 U	3.4 UJ	3.4 UJ	3.6 UJ	3.4 UJ	4 UJ
bis(2-Chloroethoxy)methane	NE	5	µg/L	1 U	1 U	1 U	1.1 U	1 U	1.2 U
bis(2-Chloroethyl)ether	NE	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.5 U
bis(2-Ethylhexyl)phthalate	NE	5	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.4 U
Caprolactam	NE	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-104-08 11/16/2010	MW-104-08 3/30/2011	MW-104-08 DUP 3/30/2011	MW-104R-10 11/18/2010	MW-104R-10 3/30/2011	MW-105-08 11/19/2010
Carbazole	5	NE	µg/L	0.95 U	0.95 U	0.95 U	0.99 U	0.95 U	1.8 J
Dibenzofuran	5	NE	µg/L	0.96 U	0.96 U	0.96 U	1 U	0.96 U	2.1 J
Benzyl butyl phthalate	50	NE	µg/L	0.87 U	0.87 U	0.87 U	0.91 U	0.87 U	1.1 U
Dimethyl phthalate	50	NE	µg/L	0.65 U	0.65 U	0.65 U	0.68 U	0.65 U	0.77 U
dl-n-Octyl phthalate	50	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.3 U
Hexachlorobenzene	NE	0.04	µg/L	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.3 U
Hexachlorobutadiene	NE	0.5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.5 U
Hexachlorocyclopentadiene	NE	5	µg/L	2 U	2 U	2 U	2.1 U	2 U	2.4 UJ
Hexachloroethane	NE	5	µg/L	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.5 U
Isophorone	50	NE	µg/L	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U	1.7 U
Nitrobenzene	NE	0.4	µg/L	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U	1.6 U
N-Nitroso-di-n-propylamine	5	NE	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.8 U
N-Nitrosodiphenylamine	50		µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.4 U
Pentachlorophenol	NE	1	µg/L	23 U	23 U	23 U	24 U	23 U	27 U
Phenol	NE	1	µg/L	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	1.5 UJ
Inorganic Constituents									
Cyanide, total	NE	200	µg/L	3 U	6 U	6 U	29	11	48
Cyanide, free	NE	NE	µg/L	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-105-08 3/31/2011	MW-106R-10 11/18/2010	MW-106R-10 3/31/2011	MW-107-08 11/18/2010	MW-107-08 3/30/2011	MW-108-09 11/16/2010	MW-108-09 3/28/2011
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	NE	1	µg/L	0.32 J	**8700**	**3200**	**17**	**29**	0.31 U	0.31 U
Toluene	NE	5	µg/L	0.3 U	140 UJ	**35**	1.7 UJ	1.7	0.21 U	0.3 U
Ethylbenzene	NE	5	µg/L	0.42 U	**1100**	**240**	**32**	**28**	0.42 U	0.42 U
1,2-Dimethylbenzene (o-Xylene)	NE	5	µg/L	0.4 U	**460**	**110**	**11**	**9.1**	0.4 U	0.4 U
m,p-Xylene (sum of isomers)	NE	5	µg/L	0.81 U	**800**	**170**	**12**	**12**	0.81 U	0.81 U
Total BTEX	NE	NE	µg/L	0.32	11060	3755	72	80	ND	ND
Other VOCs										
1,1,1-Trichloroethane	NE	5	µg/L	0.3 U	8 U	3 U	0.16 U	0.3 U	0.16 U	0.3 U
1,1,2,2-Tetrachloroethane	NE	5	µg/L	0.3 U	10 U	3 U	0.2 U	0.3 U	0.2 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	5	µg/L	0.4 U	20 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1,2-Trichloroethane	NE	1	µg/L	0.3 U	15 U	3 U	0.28 U	0.3 U	0.28 U	0.3 U
1,1-Dichloroethane	NE	5	µg/L	0.3 U	6.5 U	3 U	0.13 U	0.3 U	0.13 U	0.3 U
1,1-Dichloroethene	NE	5	µg/L	0.37 U	19 U	3.7 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trichlorobenzene	NE	5	µg/L	0.3 U	13 U	3 U	0.26 U	0.3 U	0.26 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	0.04	µg/L	0.43 U	22 U	4.3 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dibromoethane (EDB)	NE	0.0006	µg/L	0.3 U	13 U	3 U	0.26 U	0.3 U	0.26 U	0.3 U
1,2-Dichlorobenzene	NE	3	µg/L	0.4 U	20 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	NE	0.6	µg/L	0.3 U	7.5 U	3 U	0.15 U	0.3 U	0.15 U	0.3 U
1,2-Dichloropropane	NE	1	µg/L	0.66 U	33 U	6.7 U	0.66 U	0.66 U	0.66 U	0.66 U
1,3-Dichlorobenzene	NE	3	µg/L	0.36 U	18 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dichlorobenzene	NE	3	µg/L	0.34 U	17 U	3.5 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Butanone (MEK)	50	NE	µg/L	1 U	50 U	10 U	1 U	1 U	1 U	1 U
2-Hexanone	50	NE	µg/L	0.4 U	20 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone (MIBK)	NE	NE	µg/L	0.34 U	17 U	3.5 U	0.34 U	0.34 U	0.34 U	0.34 U
Acetone	50	NE	µg/L	1.6 UJ	80 U	16 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromodichloromethane	50	NE	µg/L	0.41 U	21 U	4.1 U	0.41 U	0.41 U	0.41 U	0.41 U
Bromoform	50	NE	µg/L	0.3 U	15 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	NE	5	µg/L	0.4 U	20 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon tetrachloride	NE	5	µg/L	0.36 U	18 U	3.6 U	0.36 U	0.36 U	0.36 U	0.36 U
Carbon disulfide	NE	60	µg/L	0.35 U	18 U	3.5 U	0.35 U	0.35 U	0.35 U	0.35 U
Chlorobenzene	NE	5	µg/L	0.3 U	13 U	3 U	0.26 U	0.3 U	0.26 U	0.3 U
Chloroethane	NE	5	µg/L	0.3 U	13 U	3 U	0.25 U	0.3 U	0.25 U	0.3 U
Chloroform	NE	7	µg/L	0.3 U	10 U	3 U	0.2 U	0.3 U	0.2 U	0.3 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-105-08 3/31/2011	MW-106R-10 11/18/2010	MW-106R-10 3/31/2011	MW-107-08 11/18/2010	MW-107-08 3/30/2011	MW-108-09 11/16/2010	MW-108-09 3/28/2011
Chloromethane	NE	5	µg/L	0.46 U	23 U	4.7 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	NE	NE	µg/L	0.3 U	8.5 U	3 U	1.3	1.3	0.17 U	0.3 U
cis-1,2-Dichloroethene	NE	5	µg/L	0.3 U	11 U	3 U	0.22 U	0.3 U	0.22 U	0.3 U
cis-1,3-Dichloropropene	NE	0.4	µg/L	0.3 U	9 U	3 U	0.18 U	0.3 U	0.18 U	0.3 U
Dibromochloromethane	50	50	µg/L	0.3 U	10 U	3 U	0.2 U	0.3 U	0.2 U	0.3 U
Dichlorodifluoromethane (Freon 12)	NE	5	µg/L	0.73 U	37 U	7.3 U	0.73 U	0.73 U	0.73 U	0.73 U
Isopropylbenzene (Cumene)	NE	5	µg/L	0.4 J	**33 J**	**8.2 J**	3.3	2.8	0.34 U	0.34 U
Methyl acetate	NE	NE	µg/L	0.66 U	33 U	6.7 U	0.66 U	0.66 U	0.66 U	0.66 U
Methylcyclohexane	NE	NE	µg/L	0.3 U	9.5 U	3 U	0.51 J	0.34 J	0.19 U	0.3 U
Methylene chloride	NE	5	µg/L	0.3 U	14 U	3 U	0.27 U	0.3 U	0.27 U	0.3 U
tert-Butyl methyl ether (MTBE)	10	NE	µg/L	0.3 U	6.5 U	3 U	0.13 U	0.3 U	0.13 U	0.3 U
Styrene	NE	5	µg/L	0.35 U	18 U	3.5 U	0.77 J	0.97 J	0.35 U	0.35 U
Tetrachloroethene (PCE)	NE	5	µg/L	0.42 U	21 U	4.2 U	0.42 U	0.42 U	0.42 U	0.42 U
trans-1,2-Dichloroethene	NE	5	µg/L	0.3 U	8 U	3 U	0.16 U	0.3 U	0.16 U	0.3 U
trans-1,3-Dichloropropene	NE	0.4	µg/L	0.3 U	8.5 U	3 U	0.17 U	0.3 U	0.17 U	0.3 U
Trichloroethene (TCE)	NE	5	µg/L	0.3 U	9.5 U	3 U	0.19 U	0.3 U	0.19 U	0.3 U
Trichlorofluoromethane (Freon 11)	NE	5	µg/L	0.3 U	11 U	3 U	0.22 U	0.3 U	0.22 U	0.3 U
Vinyl chloride	NE	2	µg/L	0.3 U	15 U	3 U	0.28 U	0.3 U	0.28 U	0.3 U
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	20	NE	µg/L	15	**32**	9.2 J	**84**	**90**	1.2 U	1.2 U
Acenaphthylene	NE	NE	µg/L	3.2 J	4.6 J	2 U	11	12	0.97 U	0.97 U
Anthracene	50	NE	µg/L	0.6 U	2.5 J	1.2 U	7.3 J	6.9 J	0.6 U	0.6 U
Benzo(a)anthracene	0.002	NE	µg/L	0.73 U	0.77 U	1.5 U	0.73 U	0.73 U	0.73 U	0.73 U
Benzo(a)pyrene	NE	0	µg/L	0.5 U	0.53 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzo(b)fluoranthene	0.002	NE	µg/L	0.75 U	0.79 U	1.5 U	0.75 U	0.75 U	0.75 U	0.75 U
Benzo(g,h,i)perylene	NE	NE	µg/L	0.79 U	0.83 U	1.6 U	0.79 U	0.79 U	0.79 U	0.79 U
Benzo(k)fluoranthene	0.002	NE	µg/L	1.1 U	1.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U
Chrysene	0.002	NE	µg/L	1.2 U	1.2 U	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U
Dibenz(a,h)anthracene	NE	NE	µg/L	0.82 U	0.86 U	1.7 U	0.82 U	0.82 U	0.82 U	0.82 U
Fluoranthene	50	NE	µg/L	1.1 J	1.1 U	2 U	6.1 J	4.5 J	0.98 U	0.98 U
Fluorene	50	NE	µg/L	1.7 J	7.3 J	2.3 J	24	25 J	1.1 U	1.1 U
Indeno(1,2,3-c,d)pyrene	0.002	NE	µg/L	0.77 U	0.81 U	1.6 U	0.77 U	0.77 U	0.77 U	0.77 U
Naphthalene	10	NE	µg/L	2 J	**1300**	**240**	**130**	**87**	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-105-08 3/31/2011	MW-106R-10 11/18/2010	MW-106R-10 3/31/2011	MW-107-08 11/18/2010	MW-107-08 3/30/2011	MW-108-09 11/16/2010	MW-108-09 3/28/2011
Phenanthrene	50	NE	µg/L	4.1 J	13	2.4 J	44	**51**	0.85 U	0.85 U
Pyrene	50	NE	µg/L	1.8 J	1.3 J	1.7 U	7.1 J	5.8 J	0.85 U	0.85 U
2-Methylnaphthalene	NE	4.7	µg/L	0.99 U	**110**	2.4 J	**9.1 J**	**6.7 J**	0.99 U	0.99 U
Total PAHs	NE	NE	µg/L	29	1471	256	323	289	ND	ND
Other SVOCs										
Biphenyl (Diphenyl)	NE	5	µg/L	1.1 U	**10**	2.1 U	**22**	**30**	1.1 U	1.1 U
2,4,5-Trichlorophenol	NE	1	µg/L	1.2 U	1.3 U	2.4 U	1.2 U	1.2 U	1.2 U	1.2 U
2,4,6-Trichlorophenol	NE	1	µg/L	1.1 U	1.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U
2,2-oxybis(1-Chloropropane)	NE	5	µg/L	1.4 U	1.5 U	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U
2,4-Dichlorophenol	NE	1	µg/L	0.91 U	0.95 U	1.9 U	0.91 U	0.91 U	0.91 U	0.91 U
2,4-Dimethylphenol	NE	50	µg/L	1.6 U	2.4 J	3.2 U	1.6 U	1.6 U	1.6 U	1.6 U
2,4-Dinitrophenol	10	NE	µg/L	34 U	36 U	68 U	34 U	34 U	34 U	34 U
2,4-Dinitrotoluene	NE	5	µg/L	1.2 U	1.2 U	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U
2,6-Dinitrotoluene	NE	5	µg/L	1.3 U	1.4 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Chloronaphthalene	NE	10	µg/L	0.97 U	1.1 U	2 U	0.97 U	0.97 U	0.97 U	0.97 U
2-Chlorophenol	NE	1	µg/L	1.3 U	1.4 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Methylphenol (o-cresol)	NE	1	µg/L	0.74 U	0.78 U	1.5 U	0.74 U	0.74 U	0.74 U	0.74 U
2-Nitroaniline	NE	5	µg/L	14 U	15 U	27 U	14 U	14 U	14 U	14 U
2-Nitrophenol	NE	1	µg/L	1.2 U	1.2 U	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U
3,3'-Dichlorobenzidine	NE	5	µg/L	1.5 U	1.6 U	3 U	1.5 U	1.5 U	1.5 U	1.5 U
3-Nitroaniline	NE	5	µg/L	12 U	12 U	23 U	12 U	12 U	12 U	12 U
4,6-Dinitro-2-methylphenol	NE	1	µg/L	22 U	23 UJ	44 U	22 UJ	22 U	22 U	22 U
4-Bromophenyl phenyl ether	NE	5	µg/L	0.84 U	0.88 U	1.7 U	0.84 U	0.84 U	0.84 U	0.84 U
4-Chloro-3-methylphenol	NE	1	µg/L	0.76 U	0.8 U	1.6 U	0.76 U	0.76 U	0.76 U	0.76 U
4-Chloroaniline	NE	5	µg/L	1.6 U	1.7 U	3.1 U	1.6 U	1.6 U	1.6 U	1.6 U
4-Chlorophenyl phenyl ether	NE	5	µg/L	0.73 U	0.77 U	1.5 U	0.73 U	0.73 U	0.73 U	0.73 U
4-Nitroaniline	NE	5	µg/L	11 U	12 U	22 U	11 U	11 U	11 U	11 U
4-Nitrophenol	NE	1	µg/L	9.4 U	9.8 U	19 U	9.4 U	9.4 U	9.4 U	9.4 U
Acetophenone	NE	NE	µg/L	2.1 U	2.2 U	4.4 J	2.1 U	2.1 U	2.1 U	2.1 U
Atrazine	NE	7.5	µg/L	2.2 U	2.3 U	4.4 U	2.2 U	2.2 U	2.2 U	2.2 U
Benzaldehyde	NE	NE	µg/L	3.4 U	3.6 UJ	6.8 UJ	3.4 UJ	3.4 UJ	3.4 U	3.4 UJ
bis(2-Chloroethoxy)methane	NE	5	µg/L	1 U	1.1 U	2 U	1 U	1 U	1 U	1 U
bis(2-Chloroethyl)ether	NE	1	µg/L	1.3 U	1.3 U	2.5 U	1.3 U	1.3 U	1.3 U	1.3 U
bis(2-Ethylhexyl)phthalate	NE	5	µg/L	1.2 U	1.2 U	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U
Caprolactam	NE	NE	µg/L	1.1 U	1.1 U	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-105-08 3/31/2011	MW-106R-10 11/18/2010	MW-106R-10 3/31/2011	MW-107-08 11/18/2010	MW-107-08 3/30/2011	MW-108-09 11/16/2010	MW-108-09 3/28/2011
Carbazole	5	NE	µg/L	0.95 U	4.1 J	1.9 U	1.3 J	0.95 U	0.95 U	0.95 U
Dibenzofuran	5	NE	µg/L	0.96 U	1.5 J	2 U	**5.3 J**	**5.9 J**	0.96 U	0.96 U
Benzyl butyl phthalate	50	NE	µg/L	0.87 U	0.91 U	1.8 U	0.87 U	0.87 U	0.87 U	0.87 U
Dimethyl phthalate	50	NE	µg/L	0.65 U	0.68 U	1.3 U	0.65 U	0.65 U	0.65 U	0.65 U
dI-n-Octyl phthalate	50	NE	µg/L	1.1 U	1.1 U	2.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobenzene	NE	0.04	µg/L	1.1 U	1.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobutadiene	NE	0.5	µg/L	1.3 U	1.3 U	2.5 U	1.3 U	1.3 U	1.3 U	1.3 U
Hexachlorocyclopentadiene	NE	5	µg/L	2 U	2.1 UJ	4 U	2 UJ	2 U	2 U	2 U
Hexachloroethane	NE	5	µg/L	1.3 U	1.4 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U
Isophorone	50	NE	µg/L	1.4 U	1.5 U	2.8 U	1.4 U	1.4 U	1.4 U	1.4 U
Nitrobenzene	NE	0.4	µg/L	1.3 U	1.4 U	2.6 U	1.3 U	1.3 U	1.3 U	1.3 U
N-Nitroso-di-n-propylamine	5	NE	µg/L	1.6 U	1.6 U	3.1 U	1.6 U	1.6 U	1.6 U	1.6 U
N-Nitrosodiphenylamine	50		µg/L	1.2 U	1.2 U	2.3 U	1.2 U	1.2 U	1.2 U	1.2 U
Pentachlorophenol	NE	1	µg/L	23 U	24 U	45 U	23 U	23 U	23 U	23 U
Phenol	NE	1	µg/L	0.4 U	**25**	**35**	1.4 UJ	0.4 U	0.4 U	0.4 U
Inorganic Constituents										
Cyanide, total	NE	200	µg/L	74	60	43	32	18	3 U	6 U
Cyanide, free	NE	NE	µg/L	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-108R-10 11/18/2010	MW-108R-10 3/28/2011	MW-109S-09 11/15/2010	MW-109S-09 3/29/2011	MW-109D-09 11/16/2010	MW-109D-09 3/29/2011	MW-110-09 11/16/2010
Volatile Organic Compounds (VOCs)										
BTEX										
Benzene	NE	1	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Toluene	NE	5	µg/L	0.21 U	0.3 U	0.21 U	0.3 U	0.21 U	0.3 U	0.21 U
Ethylbenzene	NE	5	µg/L	1	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2-Dimethylbenzene (o-Xylene)	NE	5	µg/L	0.47 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
m,p-Xylene (sum of isomers)	NE	5	µg/L	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Total BTEX	NE	NE	µg/L	1.5	ND	ND	ND	ND	ND	ND
Other VOCs										
1,1,1-Trichloroethane	NE	5	µg/L	0.16 U	0.3 U	0.16 U	0.3 U	0.16 U	0.3 U	0.16 U
1,1,2,2-Tetrachloroethane	NE	5	µg/L	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1,2-Trichloroethane	NE	1	µg/L	0.28 U	0.3 U	0.28 U	0.3 U	0.28 U	0.3 U	0.28 U
1,1-Dichloroethane	NE	5	µg/L	0.13 U	0.3 U	0.13 U	0.3 U	0.13 U	0.3 U	0.13 U
1,1-Dichloroethene	NE	5	µg/L	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trichlorobenzene	NE	5	µg/L	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	0.04	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dibromoethane (EDB)	NE	0.0006	µg/L	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U
1,2-Dichlorobenzene	NE	3	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	NE	0.6	µg/L	0.15 U	0.3 U	0.15 U	0.3 U	0.15 U	0.3 U	0.15 U
1,2-Dichloropropane	NE	1	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
1,3-Dichlorobenzene	NE	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dichlorobenzene	NE	3	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Butanone (MEK)	50	NE	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	25
2-Hexanone	50	NE	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone (MIBK)	NE	NE	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Acetone	50	NE	µg/L	2.2 J	6.6	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromodichloromethane	50	NE	µg/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Bromoform	50	NE	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon tetrachloride	NE	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Carbon disulfide	NE	60	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Chlorobenzene	NE	5	µg/L	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U
Chloroethane	NE	5	µg/L	0.25 U	0.3 U	0.25 U	0.3 U	0.25 U	0.3 U	0.25 U
Chloroform	NE	7	µg/L	1.1	0.3 U	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-108R-10 11/18/2010	MW-108R-10 3/28/2011	MW-109S-09 11/15/2010	MW-109S-09 3/29/2011	MW-109D-09 11/16/2010	MW-109D-09 3/29/2011	MW-110-09 11/16/2010
Chloromethane	NE	5	µg/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	NE	NE	µg/L	0.17 U	0.3 U	0.17 U	0.3 U	0.17 U	0.3 U	0.17 U
cis-1,2-Dichloroethene	NE	5	µg/L	0.22 U	0.3 U	0.22 U	0.3 U	0.22 U	0.3 U	0.22 U
cis-1,3-Dichloropropene	NE	0.4	µg/L	0.18 U	0.3 U	0.18 U	0.3 U	0.18 U	0.3 U	0.18 U
Dibromochloromethane	50	50	µg/L	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U
Dichlorodifluoromethane (Freon 12)	NE	5	µg/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Isopropylbenzene (Cumene)	NE	5	µg/L	0.46 J	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	NE	NE	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Methylcyclohexane	NE	NE	µg/L	0.19 U	0.3 U	0.19 U	0.3 U	0.19 U	0.3 U	0.19 U
Methylene chloride	NE	5	µg/L	0.27 U	0.3 U	0.27 U	0.3 U	0.27 U	0.3 U	0.27 U
tert-Butyl methyl ether (MTBE)	10	NE	µg/L	0.13 U	0.3 U	0.13 U	0.3 U	0.13 U	0.3 U	0.13 U
Styrene	NE	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tetrachloroethene (PCE)	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
trans-1,2-Dichloroethene	NE	5	µg/L	0.16 U	0.3 U	0.16 U	0.3 U	0.16 U	0.3 U	0.16 U
trans-1,3-Dichloropropene	NE	0.4	µg/L	0.17 U	0.3 U	0.17 U	0.3 U	0.17 U	0.3 U	0.17 U
Trichloroethene (TCE)	NE	5	µg/L	0.19 U	0.3 U	0.19 U	0.3 U	0.19 U	0.3 U	0.19 U
Trichlorofluoromethane (Freon 11)	NE	5	µg/L	0.22 U	0.3 U	0.22 U	0.3 U	0.22 U	0.3 U	0.22 U
Vinyl chloride	NE	2	µg/L	0.28 U	0.3 U	0.28 U	0.3 U	0.28 U	0.3 U	0.28 U
Semi-volatile Organic Compounds (SVOCs)										
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	20	NE	µg/L	1.2 J	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Acenaphthylene	NE	NE	µg/L	0.97 U	0.98 U	0.97 U	0.97 U	0.97 U	1.1 U	0.97 U
Anthracene	50	NE	µg/L	0.6 U	0.61 U	0.6 U	0.6 U	0.6 U	0.64 U	0.6 U
Benzo(a)anthracene	0.002	NE	µg/L	0.73 U	0.74 U	0.73 U	0.73 U	0.73 U	0.77 U	0.73 U
Benzo(a)pyrene	NE	0	µg/L	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U
Benzo(b)fluoranthene	0.002	NE	µg/L	0.75 U	0.76 U	0.75 U	0.75 U	0.75 U	0.79 U	0.75 U
Benzo(g,h,i)perylene	NE	NE	µg/L	0.79 U	0.8 U	0.79 U	0.79 U	0.79 U	0.84 U	0.79 U
Benzo(k)fluoranthene	0.002	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Chrysene	0.002	NE	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Dibenz(a,h)anthracene	NE	NE	µg/L	0.82 U	0.83 U	0.82 U	0.82 U	0.82 U	0.87 U	0.82 U
Fluoranthene	50	NE	µg/L	0.98 U	0.99 U	0.98 U	0.98 U	0.98 U	1.1 U	0.98 U
Fluorene	50	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Indeno(1,2,3-c,d)pyrene	0.002	NE	µg/L	0.77 U	0.78 U	0.77 U	0.77 U	0.77 U	0.82 U	0.77 U
Naphthalene	10	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-108R-10 11/18/2010	MW-108R-10 3/28/2011	MW-109S-09 11/15/2010	MW-109S-09 3/29/2011	MW-109D-09 11/16/2010	MW-109D-09 3/29/2011	MW-110-09 11/16/2010
Phenanthrene	50	NE	µg/L	1.9 J	0.86 U	0.85 U	0.85 U	0.85 U	0.9 U	0.85 U
Pyrene	50	NE	µg/L	0.85 U	0.86 U	0.85 U	0.85 U	0.85 U	0.9 U	0.85 U
2-Methylnaphthalene	NE	4.7	µg/L	0.99 U	1 U	0.99 U	0.99 U	0.99 U	1.1 U	0.99 U
Total PAHs	NE	NE	µg/L	3.1	ND	ND	ND	ND	ND	ND
Other SVOCs										
Biphenyl (Diphenyl)	NE	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2,4,5-Trichlorophenol	NE	1	µg/L	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
2,4,6-Trichlorophenol	NE	1	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
2,2-oxybis(1-Chloropropane)	NE	5	µg/L	1.4 U	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U
2,4-Dichlorophenol	NE	1	µg/L	0.91 U	0.92 U	0.91 U	0.91 U	0.91 U	0.96 U	0.91 U
2,4-Dimethylphenol	NE	50	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U
2,4-Dinitrophenol	10	NE	µg/L	34 U	35 U	34 UJ	34 U	34 UJ	36 U	34 UJ
2,4-Dinitrotoluene	NE	5	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
2,6-Dinitrotoluene	NE	5	µg/L	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
2-Chloronaphthalene	NE	10	µg/L	0.97 U	0.98 U	0.97 U	0.97 U	0.97 U	1.1 U	0.97 U
2-Chlorophenol	NE	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
2-Methylphenol (o-cresol)	NE	1	µg/L	0.74 U	0.75 U	0.74 U	0.74 U	0.74 U	0.78 U	0.74 U
2-Nitroaniline	NE	5	µg/L	14 U	14 U	14 U	14 U	14 U	15 U	14 U
2-Nitrophenol	NE	1	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
3,3'-Dichlorobenzidine	NE	5	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U
3-Nitroaniline	NE	5	µg/L	12 U	12 U	12 U	12 U	12 U	12 U	12 U
4,6-Dinitro-2-methylphenol	NE	1	µg/L	22 UJ	23 U	22 U	22 U	22 U	24 U	22 U
4-Bromophenyl phenyl ether	NE	5	µg/L	0.84 U	0.85 U	0.84 U	0.84 U	0.84 U	0.89 U	0.84 U
4-Chloro-3-methylphenol	NE	1	µg/L	0.76 U	0.77 U	0.76 U	0.76 U	0.76 U	0.8 U	0.76 U
4-Chloroaniline	NE	5	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U
4-Chlorophenyl phenyl ether	NE	5	µg/L	0.73 U	0.74 U	0.73 U	0.73 U	0.73 U	0.77 U	0.73 U
4-Nitroaniline	NE	5	µg/L	11 U	11 U	11 U	11 U	11 U	12 U	11 U
4-Nitrophenol	NE	1	µg/L	9.4 U	9.5 U	9.4 U	9.4 U	9.4 U	9.9 U	9.4 U
Acetophenone	NE	NE	µg/L	2.1 U	2.2 U	2.1 U	2.1 U	2.1 U	2.2 U	2.1 U
Atrazine	NE	7.5	µg/L	2.2 U	2.3 U	2.2 U	2.2 U	2.2 U	2.3 U	2.2 U
Benzaldehyde	NE	NE	µg/L	3.4 UJ	3.5 UJ	3.4 UJ	3.4 UJ	3.4 UJ	3.6 UJ	3.4 UJ
bis(2-Chloroethoxy)methane	NE	5	µg/L	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U
bis(2-Chloroethyl)ether	NE	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
bis(2-Ethylhexyl)phthalate	NE	5	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Caprolactam	NE	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-108R-10 11/18/2010	MW-108R-10 3/28/2011	MW-109S-09 11/15/2010	MW-109S-09 3/29/2011	MW-109D-09 11/16/2010	MW-109D-09 3/29/2011	MW-110-09 11/16/2010
Carbazole	5	NE	µg/L	0.95 U	0.96 U	0.95 U	0.95 U	0.95 U	1 U	0.95 U
Dibenzofuran	5	NE	µg/L	0.96 U	0.97 U	0.96 U	0.96 U	0.96 U	1.1 U	0.96 U
Benzyl butyl phthalate	50	NE	µg/L	0.87 U	0.88 U	0.87 U	0.87 U	0.87 U	0.92 U	0.87 U
Dimethyl phthalate	50	NE	µg/L	0.65 U	0.66 U	0.65 U	0.65 U	0.65 U	0.69 U	0.65 U
dI-n-Octyl phthalate	50	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Hexachlorobenzene	NE	0.04	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Hexachlorobutadiene	NE	0.5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Hexachlorocyclopentadiene	NE	5	µg/L	2 UJ	2 U	2 UJ	2 U	2 UJ	2.1 U	2 UJ
Hexachloroethane	NE	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
Isophorone	50	NE	µg/L	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U
Nitrobenzene	NE	0.4	µg/L	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
N-Nitroso-di-n-propylamine	5	NE	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
N-Nitrosodiphenylamine	50		µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Pentachlorophenol	NE	1	µg/L	23 U	23 U	23 U	23 U	23 U	24 U	23 U
Phenol	NE	1	µg/L	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.43 U	0.4 U
Inorganic Constituents										
Cyanide, total	NE	200	µg/L	3 U	6 U	3 U	6 U	3 U	6 U	3 U
Cyanide, free	NE	NE	µg/L	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-110-09 3/29/2011	MW-110R-10 11/17/2010	MW-110R-10 3/29/2011	MW-111-09 11/16/2010	MW-111-09 DUP 11/16/2010	MW-111-09 3/28/2011
Volatile Organic Compounds (VOCs)									
BTEX									
Benzene	NE	1	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Toluene	NE	5	µg/L	0.3 U	0.21 U	0.3 U	0.21 U	0.21 U	0.3 U
Ethylbenzene	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2-Dimethylbenzene (o-Xylene)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
m,p-Xylene (sum of isomers)	NE	5	µg/L	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Total BTEX	NE	NE	µg/L	ND	ND	ND	ND	ND	ND
Other VOCs									
1,1,1-Trichloroethane	NE	5	µg/L	0.3 U	0.16 U	0.3 U	0.16 U	0.16 U	0.3 U
1,1,2,2-Tetrachloroethane	NE	5	µg/L	0.3 U	0.2 U	0.3 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1,2-Trichloroethane	NE	1	µg/L	0.3 U	0.28 U	0.3 U	0.28 U	0.28 U	0.3 U
1,1-Dichloroethane	NE	5	µg/L	0.3 U	0.13 U	0.3 U	0.13 U	0.13 U	0.3 U
1,1-Dichloroethene	NE	5	µg/L	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trichlorobenzene	NE	5	µg/L	0.3 U	0.26 U	0.3 U	0.26 U	0.26 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	0.04	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dibromoethane (EDB)	NE	0.0006	µg/L	0.3 U	0.26 U	0.3 U	0.26 U	0.26 U	0.3 U
1,2-Dichlorobenzene	NE	3	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	NE	0.6	µg/L	0.3 U	0.15 U	0.3 U	0.15 U	0.15 U	0.3 U
1,2-Dichloropropane	NE	1	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
1,3-Dichlorobenzene	NE	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dichlorobenzene	NE	3	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Butanone (MEK)	50	NE	µg/L	3.1 J	1 U	1 U	1 U	1 U	1 U
2-Hexanone	50	NE	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone (MIBK)	NE	NE	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Acetone	50	NE	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromodichloromethane	50	NE	µg/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Bromoform	50	NE	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon tetrachloride	NE	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Carbon disulfide	NE	60	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Chlorobenzene	NE	5	µg/L	0.3 U	0.26 U	0.3 U	0.26 U	0.26 U	0.3 U
Chloroethane	NE	5	µg/L	0.3 U	0.25 U	0.3 U	0.25 U	0.25 U	0.3 U
Chloroform	NE	7	µg/L	0.3 U	0.2 U	0.3 U	1.2	1.2	4

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-110-09 3/29/2011	MW-110R-10 11/17/2010	MW-110R-10 3/29/2011	MW-111-09 11/16/2010	MW-111-09 DUP 11/16/2010	MW-111-09 3/28/2011
Chloromethane	NE	5	µg/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	NE	NE	µg/L	0.3 U	0.17 U	0.3 U	0.17 U	0.17 U	0.3 U
cis-1,2-Dichloroethene	NE	5	µg/L	0.3 U	0.22 U	0.3 U	0.22 U	0.22 U	0.3 U
cis-1,3-Dichloropropene	NE	0.4	µg/L	0.3 U	0.18 U	0.3 U	0.18 U	0.18 U	0.3 U
Dibromochloromethane	50	50	µg/L	0.3 U	0.2 U	0.3 U	0.2 U	0.2 U	0.3 U
Dichlorodifluoromethane (Freon 12)	NE	5	µg/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Isopropylbenzene (Cumene)	NE	5	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	NE	NE	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Methylcyclohexane	NE	NE	µg/L	0.3 U	0.19 U	0.3 U	0.19 U	0.19 U	0.3 U
Methylene chloride	NE	5	µg/L	0.3 U	0.27 U	0.3 U	0.27 U	0.27 U	0.3 U
tert-Butyl methyl ether (MTBE)	10	NE	µg/L	0.3 U	0.13 U	0.3 U	0.13 U	0.13 U	0.3 U
Styrene	NE	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tetrachloroethene (PCE)	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
trans-1,2-Dichloroethene	NE	5	µg/L	0.3 U	0.16 U	0.3 U	0.16 U	0.16 U	0.3 U
trans-1,3-Dichloropropene	NE	0.4	µg/L	0.3 U	0.17 U	0.3 U	0.17 U	0.17 U	0.3 U
Trichloroethene (TCE)	NE	5	µg/L	0.3 U	0.19 U	0.3 U	0.19 U	0.19 U	0.3 U
Trichlorofluoromethane (Freon 11)	NE	5	µg/L	0.3 U	0.22 U	0.3 U	0.22 U	0.22 U	0.3 U
Vinyl chloride	NE	2	µg/L	0.3 U	0.28 U	0.3 U	0.28 U	0.28 U	0.3 U
Semi-volatile Organic Compounds (SVOCs)									
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	20	NE	µg/L	1.2 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U
Acenaphthylene	NE	NE	µg/L	0.97 U	1.2 U	0.97 U	0.98 U	0.97 U	0.97 U
Anthracene	50	NE	µg/L	0.6 U	0.71 U	0.6 U	0.61 U	0.6 U	0.6 U
Benzo(a)anthracene	0.002	NE	µg/L	0.73 U	0.86 U	0.73 U	0.74 U	0.73 U	0.73 U
Benzo(a)pyrene	NE	0	µg/L	0.5 U	0.59 U	0.5 U	0.51 U	0.5 U	0.5 U
Benzo(b)fluoranthene	0.002	NE	µg/L	0.75 U	0.89 U	0.75 U	0.76 U	0.75 U	0.75 U
Benzo(g,h,i)perylene	NE	NE	µg/L	0.79 U	0.93 U	0.79 U	0.8 U	0.79 U	0.79 U
Benzo(k)fluoranthene	0.002	NE	µg/L	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U
Chrysene	0.002	NE	µg/L	1.2 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U
Dibenz(a,h)anthracene	NE	NE	µg/L	0.82 U	0.97 U	0.82 U	0.83 U	0.82 U	0.82 U
Fluoranthene	50	NE	µg/L	0.98 U	1.2 U	0.98 U	0.99 U	0.98 U	0.98 U
Fluorene	50	NE	µg/L	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U
Indeno(1,2,3-c,d)pyrene	0.002	NE	µg/L	0.77 U	0.91 U	0.77 U	0.78 U	0.77 U	0.77 U
Naphthalene	10	NE	µg/L	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-110-09 3/29/2011	MW-110R-10 11/17/2010	MW-110R-10 3/29/2011	MW-111-09 11/16/2010	MW-111-09 DUP 11/16/2010	MW-111-09 3/28/2011
Phenanthrene	50	NE	µg/L	0.85 U	1 U	0.85 U	0.86 U	0.85 U	0.85 U
Pyrene	50	NE	µg/L	0.85 U	1 U	0.85 U	0.86 U	0.85 U	0.85 U
2-Methylnaphthalene	NE	4.7	µg/L	0.99 U	1.2 U	0.99 U	1 U	0.99 U	0.99 U
Total PAHs	NE	NE	µg/L	ND	ND	ND	ND	ND	ND
Other SVOCs									
Biphenyl (Diphenyl)	NE	5	µg/L	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U
2,4,5-Trichlorophenol	NE	1	µg/L	1.2 U	1.5 U	1.2 U	1.3 U	1.2 U	1.2 U
2,4,6-Trichlorophenol	NE	1	µg/L	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U
2,2-oxybis(1-Chloropropane)	NE	5	µg/L	1.4 U	1.7 U	1.4 U	1.5 U	1.4 U	1.4 U
2,4-Dichlorophenol	NE	1	µg/L	0.91 U	1.1 U	0.91 U	0.92 U	0.91 U	0.91 U
2,4-Dimethylphenol	NE	50	µg/L	1.6 U	1.9 U	1.6 U	1.6 U	1.6 U	1.6 U
2,4-Dinitrophenol	10	NE	µg/L	34 U	40 U	34 U	35 UJ	34 U	34 U
2,4-Dinitrotoluene	NE	5	µg/L	1.2 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U
2,6-Dinitrotoluene	NE	5	µg/L	1.3 U	1.6 U	1.3 U	1.4 U	1.3 U	1.3 U
2-Chloronaphthalene	NE	10	µg/L	0.97 U	1.2 U	0.97 U	0.98 U	0.97 U	0.97 U
2-Chlorophenol	NE	1	µg/L	1.3 U	1.5 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Methylphenol (o-cresol)	NE	1	µg/L	0.74 U	0.88 U	0.74 U	0.75 U	0.74 U	0.74 U
2-Nitroaniline	NE	5	µg/L	14 U	16 U	14 U	14 U	14 U	14 U
2-Nitrophenol	NE	1	µg/L	1.2 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U
3,3'-Dichlorobenzidine	NE	5	µg/L	1.5 U	1.8 U	1.5 U	1.5 U	1.5 U	1.5 U
3-Nitroaniline	NE	5	µg/L	12 U	14 U	12 U	12 U	12 U	12 U
4,6-Dinitro-2-methylphenol	NE	1	µg/L	22 U	26 U	22 U	23 U	22 U	22 U
4-Bromophenyl phenyl ether	NE	5	µg/L	0.84 U	0.99 U	0.84 U	0.85 U	0.84 U	0.84 U
4-Chloro-3-methylphenol	NE	1	µg/L	0.76 U	0.9 U	0.76 U	0.77 U	0.76 U	0.76 U
4-Chloroaniline	NE	5	µg/L	1.6 U	1.9 U	1.6 U	1.6 U	1.6 U	1.6 U
4-Chlorophenyl phenyl ether	NE	5	µg/L	0.73 U	0.86 U	0.73 U	0.74 U	0.73 U	0.73 U
4-Nitroaniline	NE	5	µg/L	11 U	13 U	11 U	11 U	11 U	11 U
4-Nitrophenol	NE	1	µg/L	9.4 U	11 U	9.4 U	9.5 U	9.4 U	9.4 U
Acetophenone	NE	NE	µg/L	2.1 U	2.5 U	2.1 U	2.2 U	2.1 U	2.1 U
Atrazine	NE	7.5	µg/L	2.2 U	2.6 U	2.2 U	2.3 U	2.2 U	2.2 U
Benzaldehyde	NE	NE	µg/L	3.4 UJ	4 U	3.4 UJ	3.5 UJ	3.4 U	UJ U
bis(2-Chloroethoxy)methane	NE	5	µg/L	1 U	1.2 U	1 U	1.1 U	1 U	1 U
bis(2-Chloroethyl)ether	NE	1	µg/L	1.3 U	1.5 U	1.3 U	1.3 U	1.3 U	1.3 U
bis(2-Ethylhexyl)phthalate	NE	5	µg/L	1.2 U	2.4 J	1.2 U	1.2 U	1.2 U	1.2 U
Caprolactam	NE	NE	µg/L	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-110-09 3/29/2011	MW-110R-10 11/17/2010	MW-110R-10 3/29/2011	MW-111-09 11/16/2010	MW-111-09 DUP 11/16/2010	MW-111-09 3/28/2011
Carbazole	5	NE	µg/L	0.95 U	1.2 U	0.95 U	0.96 U	0.95 U	0.95 U
Dibenzofuran	5	NE	µg/L	0.96 U	1.2 U	0.96 U	0.97 U	0.96 U	0.96 U
Benzyl butyl phthalate	50	NE	µg/L	0.87 U	1.1 U	0.87 U	0.88 U	0.87 U	0.87 U
Dimethyl phthalate	50	NE	µg/L	0.65 U	0.77 U	0.65 U	0.66 U	0.65 U	0.65 U
dl-n-Octyl phthalate	50	NE	µg/L	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobenzene	NE	0.04	µg/L	1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobutadiene	NE	0.5	µg/L	1.3 U	1.5 U	1.3 U	1.3 U	1.3 U	1.3 U
Hexachlorocyclopentadiene	NE	5	µg/L	2 U	2.4 U	2 U	2 UJ	2 U	2 U
Hexachloroethane	NE	5	µg/L	1.3 U	1.5 U	1.3 U	1.3 U	1.3 U	1.3 U
Isophorone	50	NE	µg/L	1.4 U	1.7 U	1.4 U	1.4 U	1.4 U	1.4 U
Nitrobenzene	NE	0.4	µg/L	1.3 U	1.6 U	1.3 U	1.4 U	1.3 U	1.3 U
N-Nitroso-di-n-propylamine	5	NE	µg/L	1.6 U	1.8 U	1.6 U	1.6 U	1.6 U	1.6 U
N-Nitrosodiphenylamine	50		µg/L	1.2 U	1.4 U	1.2 U	1.2 U	1.2 U	1.2 U
Pentachlorophenol	NE	1	µg/L	23 U	27 U	23 U	23 U	23 U	23 U
Phenol	NE	1	µg/L	0.4 U	0.48 U	0.4 U	0.41 U	0.4 U	0.4 U
Inorganic Constituents									
Cyanide, total	NE	200	µg/L	6 U	3 U	6 U	3 U	3 U	6 U
Cyanide, free	NE	NE	µg/L	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-112-10 11/17/2010	MW-112-10 3/30/2011	MW-112R-10 11/17/2010	MW-112R-10 3/30/2011	MW-113R-10 11/18/2010	MW-113R-10 3/30/2011
Volatile Organic Compounds (VOCs)									
BTEX									
Benzene	NE	1	µg/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Toluene	NE	5	µg/L	0.21 U	0.3 U	0.21 U	0.3 U	0.21 U	0.3 U
Ethylbenzene	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
1,2-Dimethylbenzene (o-Xylene)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
m,p-Xylene (sum of isomers)	NE	5	µg/L	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Total BTEX	NE	NE	µg/L	ND	ND	ND	ND	ND	ND
Other VOCs									
1,1,1-Trichloroethane	NE	5	µg/L	0.16 U	0.3 U	0.16 U	0.3 U	0.16 U	0.3 U
1,1,2,2-Tetrachloroethane	NE	5	µg/L	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,1,2-Trichloroethane	NE	1	µg/L	0.28 U	0.3 U	0.28 U	0.3 U	0.28 U	0.3 U
1,1-Dichloroethane	NE	5	µg/L	0.13 U	0.3 U	0.13 U	0.3 U	0.13 U	0.3 U
1,1-Dichloroethene	NE	5	µg/L	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2,4-Trichlorobenzene	NE	5	µg/L	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	NE	0.04	µg/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,2-Dibromoethane (EDB)	NE	0.0006	µg/L	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U	0.3 U
1,2-Dichlorobenzene	NE	3	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
1,2-Dichloroethane	NE	0.6	µg/L	0.15 U	0.3 U	0.15 U	0.3 U	0.15 U	0.3 U
1,2-Dichloropropane	NE	1	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
1,3-Dichlorobenzene	NE	3	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dichlorobenzene	NE	3	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
2-Butanone (MEK)	50	NE	µg/L	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	50	NE	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone (MIBK)	NE	NE	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Acetone	50	NE	µg/L	1.6 U	1.6 U	2 J	1.6 U	1.6 U	1.7 J
Bromodichloromethane	50	NE	µg/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
Bromoform	50	NE	µg/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromomethane	NE	5	µg/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon tetrachloride	NE	5	µg/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Carbon disulfide	NE	60	µg/L	0.35 U	0.35 U	0.6 J	0.78 J	0.35 U	0.35 U
Chlorobenzene	NE	5	µg/L	0.26 U	0.3 U	0.26 U	0.3 U	0.26 U	0.3 U
Chloroethane	NE	5	µg/L	0.25 U	0.3 U	0.25 U	0.3 U	0.25 U	0.3 U
Chloroform	NE	7	µg/L	0.2 U	0.3 U	1.6	1.4	2.3	1.8

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-112-10 11/17/2010	MW-112-10 3/30/2011	MW-112R-10 11/17/2010	MW-112R-10 3/30/2011	MW-113R-10 11/18/2010	MW-113R-10 3/30/2011
Chloromethane	NE	5	µg/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Cyclohexane	NE	NE	µg/L	0.17 U	0.3 U	0.17 U	0.3 U	0.17 U	0.3 U
cis-1,2-Dichloroethene	NE	5	µg/L	0.22 U	0.3 U	0.22 U	0.3 U	0.22 U	0.3 U
cis-1,3-Dichloropropene	NE	0.4	µg/L	0.18 U	0.3 U	0.18 U	0.3 U	0.18 U	0.3 U
Dibromochloromethane	50	50	µg/L	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U	0.3 U
Dichlorodifluoromethane (Freon 12)	NE	5	µg/L	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Isopropylbenzene (Cumene)	NE	5	µg/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Methyl acetate	NE	NE	µg/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
Methylcyclohexane	NE	NE	µg/L	0.19 U	0.3 U	0.19 U	0.3 U	0.19 U	0.3 U
Methylene chloride	NE	5	µg/L	0.27 U	0.3 U	0.27 U	0.3 U	0.27 U	0.3 U
tert-Butyl methyl ether (MTBE)	10	NE	µg/L	0.13 U	0.3 U	0.13 U	0.3 U	0.13 U	0.3 U
Styrene	NE	5	µg/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
Tetrachloroethene (PCE)	NE	5	µg/L	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
trans-1,2-Dichloroethene	NE	5	µg/L	0.16 U	0.3 U	0.16 U	0.3 U	0.16 U	0.3 U
trans-1,3-Dichloropropene	NE	0.4	µg/L	0.17 U	0.3 U	0.17 U	0.3 U	0.17 U	0.3 U
Trichloroethene (TCE)	NE	5	µg/L	0.19 U	0.3 U	0.19 U	0.3 U	0.19 U	0.3 U
Trichlorofluoromethane (Freon 11)	NE	5	µg/L	0.22 U	0.3 U	0.22 U	0.3 U	0.22 U	0.3 U
Vinyl chloride	NE	2	µg/L	0.28 U	0.3 U	0.28 U	0.3 U	0.28 U	0.3 U
Semi-volatile Organic Compounds (SVOCs)									
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	20	NE	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Acenaphthylene	NE	NE	µg/L	0.99 U	0.97 U	0.97 U	0.97 U	1.1 U	0.97 U
Anthracene	50	NE	µg/L	0.62 U	0.6 U	0.6 U	0.6 U	0.66 U	0.6 U
Benzo(a)anthracene	0.002	NE	µg/L	0.75 U	0.73 U	0.73 U	0.73 U	0.8 U	0.73 U
Benzo(a)pyrene	NE	0	µg/L	0.52 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U
Benzo(b)fluoranthene	0.002	NE	µg/L	0.77 U	0.75 U	0.75 U	0.75 U	0.82 U	0.75 U
Benzo(g,h,i)perylene	NE	NE	µg/L	0.81 U	0.79 U	0.79 U	0.79 U	0.86 U	0.79 U
Benzo(k)fluoranthene	0.002	NE	µg/L	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Chrysene	0.002	NE	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Dibenz(a,h)anthracene	NE	NE	µg/L	0.84 U	0.82 U	0.82 U	0.82 U	0.9 U	0.82 U
Fluoranthene	50	NE	µg/L	1 U	0.98 U	0.98 U	0.98 U	1.1 U	0.98 U
Fluorene	50	NE	µg/L	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Indeno(1,2,3-c,d)pyrene	0.002	NE	µg/L	0.79 U	0.77 U	0.77 U	0.77 U	0.84 U	0.77 U
Naphthalene	10	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-112-10 11/17/2010	MW-112-10 3/30/2011	MW-112R-10 11/17/2010	MW-112R-10 3/30/2011	MW-113R-10 11/18/2010	MW-113R-10 3/30/2011
Phenanthrene	50	NE	µg/L	0.87 U	0.85 U	0.85 U	0.85 U	0.93 U	0.85 U
Pyrene	50	NE	µg/L	0.87 U	0.85 U	0.85 U	0.85 U	0.93 U	0.85 U
2-Methylnaphthalene	NE	4.7	µg/L	1.1 U	0.99 U	0.99 U	0.99 U	1.1 U	0.99 U
Total PAHs	NE	NE	µg/L	ND	ND	ND	ND	ND	ND
Other SVOCs									
Biphenyl (Diphenyl)	NE	5	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
2,4,5-Trichlorophenol	NE	1	µg/L	1.3 U	1.2 U	1.2 U	1.2 U	1.4 U	1.2 U
2,4,6-Trichlorophenol	NE	1	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
2,2-oxybis(1-Chloropropane)	NE	5	µg/L	1.5 U	1.4 U	1.4 U	1.4 U	1.6 U	1.4 U
2,4-Dichlorophenol	NE	1	µg/L	0.93 U	0.91 U	0.91 U	0.91 U	0.99 U	0.91 U
2,4-Dimethylphenol	NE	50	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U
2,4-Dinitrophenol	10	NE	µg/L	35 U	34 U	34 U	34 U	37 U	34 U
2,4-Dinitrotoluene	NE	5	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
2,6-Dinitrotoluene	NE	5	µg/L	1.4 U	1.3 U	1.3 U	1.3 U	1.5 U	1.3 U
2-Chloronaphthalene	NE	10	µg/L	0.99 U	0.97 U	0.97 U	0.97 U	1.1 U	0.97 U
2-Chlorophenol	NE	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
2-Methylphenol (o-cresol)	NE	1	µg/L	0.76 U	0.74 U	0.74 U	0.74 U	0.81 U	0.74 U
2-Nitroaniline	NE	5	µg/L	14 U	14 U	14 U	14 U	15 U	14 U
2-Nitrophenol	NE	1	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
3,3'-Dichlorobenzidine	NE	5	µg/L	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.5 U
3-Nitroaniline	NE	5	µg/L	12 U	12 U	12 U	12 U	13 U	12 U
4,6-Dinitro-2-methylphenol	NE	1	µg/L	23 U	22 U	22 U	22 U	24 U	22 U
4-Bromophenyl phenyl ether	NE	5	µg/L	0.86 U	0.84 U	0.84 U	0.84 U	0.92 U	0.84 U
4-Chloro-3-methylphenol	NE	1	µg/L	0.78 U	0.76 U	0.76 U	0.76 U	0.83 U	0.76 U
4-Chloroaniline	NE	5	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U
4-Chlorophenyl phenyl ether	NE	5	µg/L	0.75 U	0.73 U	0.73 U	0.73 U	0.8 U	0.73 U
4-Nitroaniline	NE	5	µg/L	11 U	11 U	11 U	11 U	12 U	11 U
4-Nitrophenol	NE	1	µg/L	9.6 U	9.4 U	9.4 U	9.4 U	11 U	9.4 U
Acetophenone	NE	NE	µg/L	2.2 U	2.1 U	2.1 U	2.1 U	2.3 U	2.1 U
Atrazine	NE	7.5	µg/L	2.3 U	2.2 U	2.2 U	2.2 U	2.4 U	2.2 U
Benzaldehyde	NE	NE	µg/L	3.5 U	3.4 UJ	3.4 UJ	3.4 U	3.7 UJ	3.4 UJ
bis(2-Chloroethoxy)methane	NE	5	µg/L	1.1 U	1 U	1 U	1 U	1.1 U	1 U
bis(2-Chloroethyl)ether	NE	1	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
bis(2-Ethylhexyl)phthalate	NE	5	µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.3 J	1.2 U
Caprolactam	NE	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U

TABLE 7
GROUNDWATER ANALYTICAL RESULTS
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-112-10 11/17/2010	MW-112-10 3/30/2011	MW-112R-10 11/17/2010	MW-112R-10 3/30/2011	MW-113R-10 11/18/2010	MW-113R-10 3/30/2011
Carbazole	5	NE	µg/L	0.97 U	0.95 U	0.95 U	0.95 U	1.1 U	0.95 U
Dibenzofuran	5	NE	µg/L	0.98 U	0.96 U	0.96 U	0.96 U	1.1 U	0.96 U
Benzyl butyl phthalate	50	NE	µg/L	0.89 U	0.87 U	0.87 U	0.87 U	0.95 U	0.87 U
Dimethyl phthalate	50	NE	µg/L	0.67 U	0.65 U	0.65 U	0.65 U	0.71 U	0.65 U
dI-n-Octyl phthalate	50	NE	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Hexachlorobenzene	NE	0.04	µg/L	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Hexachlorobutadiene	NE	0.5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
Hexachlorocyclopentadiene	NE	5	µg/L	2 U	2 U	2 U	2 U	2.2 U	2 U
Hexachloroethane	NE	5	µg/L	1.3 U	1.3 U	1.3 U	1.3 U	1.4 U	1.3 U
Isophorone	50	NE	µg/L	1.5 U	1.4 U	1.4 U	1.4 U	1.5 U	1.4 U
Nitrobenzene	NE	0.4	µg/L	1.4 U	1.3 U	1.3 U	1.3 U	1.5 U	1.3 U
N-Nitroso-di-n-propylamine	5	NE	µg/L	1.6 U	1.6 U	1.6 U	1.6 U	1.7 U	1.6 U
N-Nitrosodiphenylamine	50		µg/L	1.2 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Pentachlorophenol	NE	1	µg/L	23 U	23 U	23 U	23 U	25 U	23 U
Phenol	NE	1	µg/L	0.41 U	0.4 U	0.4 U	0.4 U	1.4 UJ	0.4 U
Inorganic Constituents									
Cyanide, total	NE	200	µg/L	3 U	17	12	6 U	3 U	6 U
Cyanide, free	NE	NE	µg/L	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	4 J

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

Figures

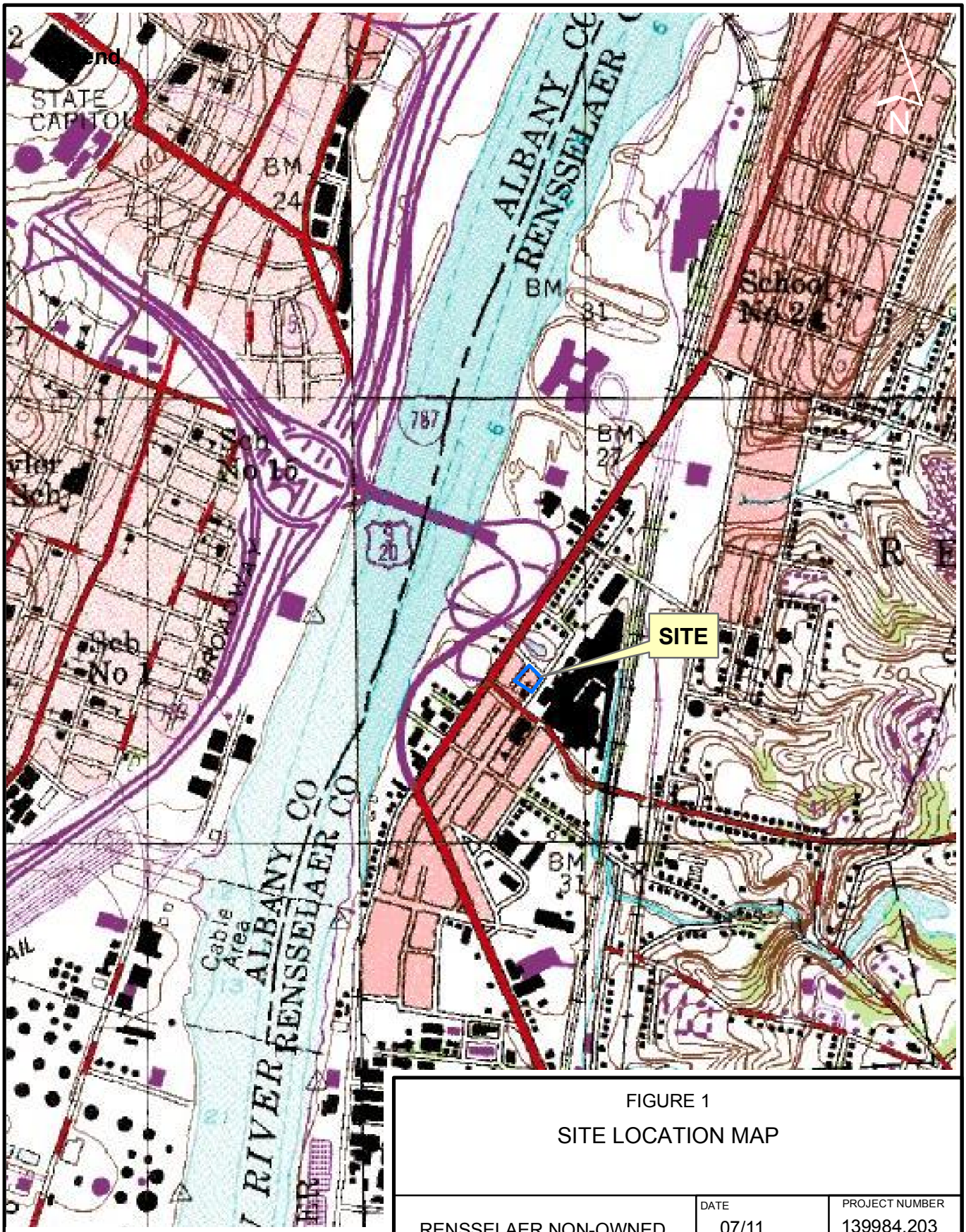


FIGURE 1

SITE LOCATION MAP

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE
07/11

PROJECT NUMBER
139984.203

Brown AND Caldwell

Associates

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

Legend

- Ground Surface Elevation Contour (ft above MSL)
- Property Line
- Pavement Edge
- Water
- Sewer Line
- Overhead Lines
- Former MGP Structure Location.
- Building
- Cross-Sections
- Monitoring Well
- Soil Boring
- Sediment Sample
- Surface Soil Sample
- Surface Soil Sample/Hand Auger Boring
- Test Pit
- Soil Vapor Probe
- Staff Gauge
- Sediment Probing Location
- Sediment Probing Transect

N

MW-109D-09
MW-109S-09
MW-108-09
MW-108R-10
SG-4-10
SG-1-09
T-1A
T-1B
T-1C
T-1D
T-1E
T-2A
SG-2-09
T-2B
T-2C
T-2D
T-2E
T-2F
SG-3-10
SED-2-08
SOIL-2-08
B-114-09
T-3A
T-3B
T-3C
T-3D
T-3E
SED-3-08
SOIL-3-08
SOIL-4-08
B-113-09
SOIL-6-08
SOIL-5-08
MW-105-08
SV-4-09
MW-106S
MW-106R-10
MW-106D
SV-5-09
MW-112-10
MW-112R-10
MW-103-05
TP-105-08
B-111-08
SOIL-7-08
SV-3-09
MW-102-05
B-110-08
CB#2
TP-103-05
TP-101-05
MW-102R-10
RETORT HOUSE
MW-104-08
MW-104R-10
B-104-05
GAS HOLDER
B-128-10
MW-107-08
MH#1
CB#1
B-109-08
SOIL-10-08
B-122-10
B-124-10
B-116-09
B-123-10
B-125-10
B-121-10
B-120-10
MW-111-09
B-119-10
B-115-09
MW-110-08
MW-110R-10
B-117-09
B-112-08
TP-104-05
METER ROOM
B-107-08
MW-113R-10
MW-101-05
B-118-10
B-106-05
TP-102-05
B-105-05
GAS HOLDER
B-108-08
PURIFIER & CONDENSER ROOMS
B-127-10
COAL SHED
SV-2-09
SOIL-8-08
SV-1-09
SOIL-9-08
HUYCK STREAM
HUYCK SQUARE
WASHINGTON STREET
ACADEMY STREET
A
A'
B
B'
C
C'
D
D'

0 25 50 100 Feet

P:/GIS/National_Grid/Rensselaer_Site_Plan_1210.mxd

FIGURE 2

SITE PLAN

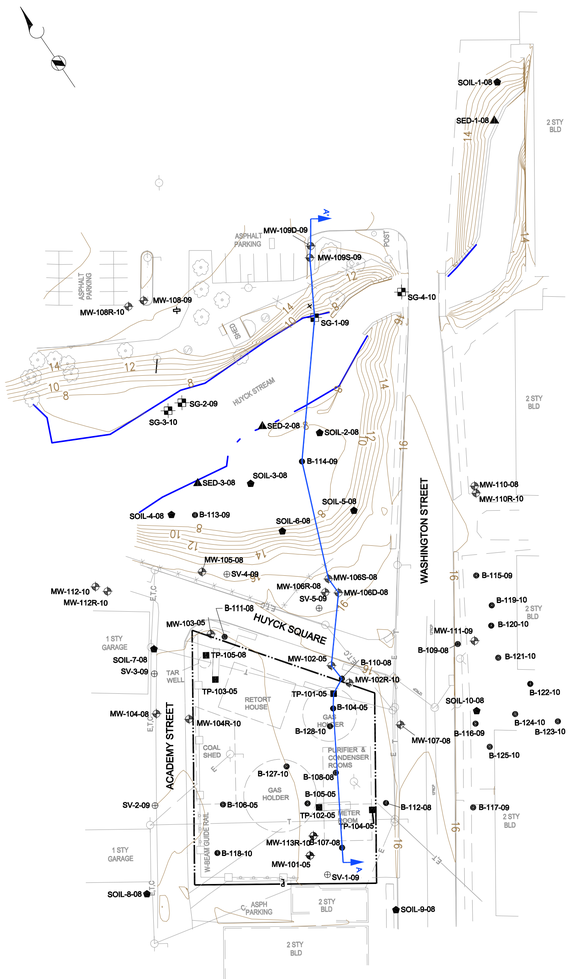
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 6/3/11

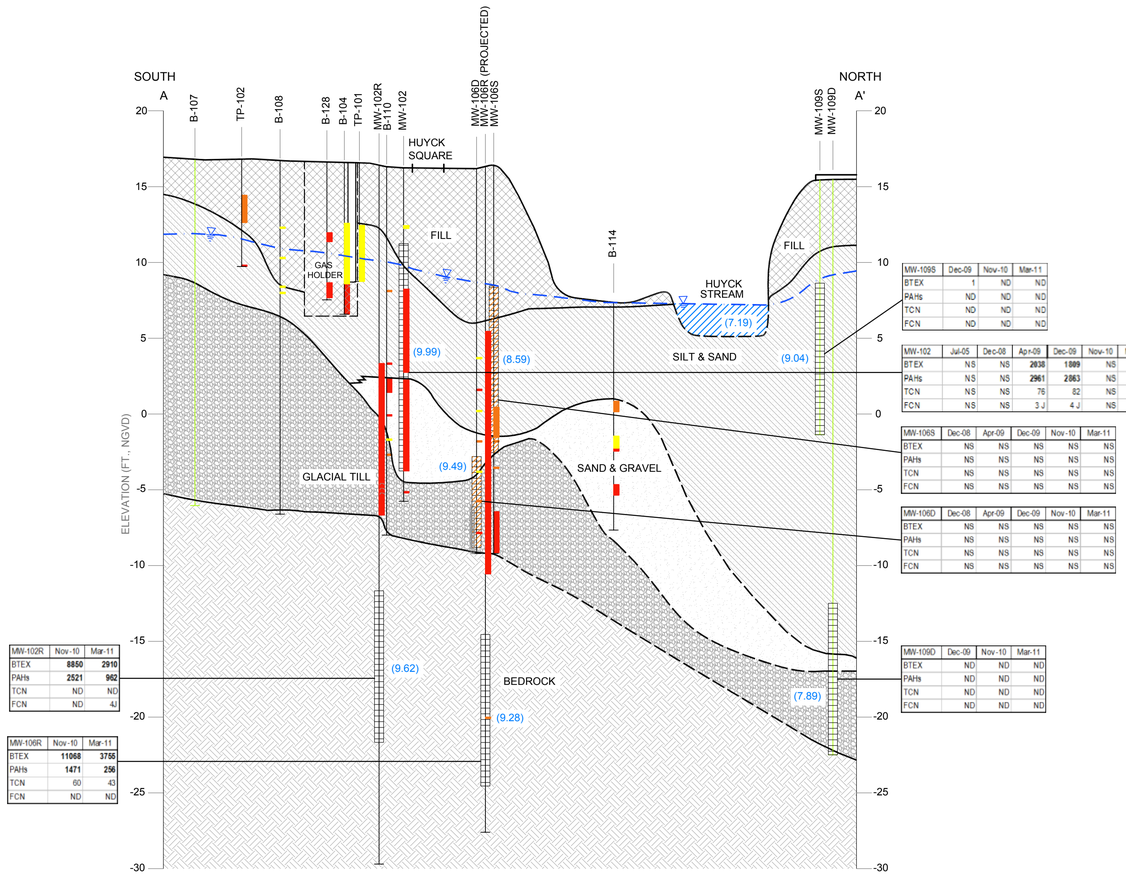
PROJECT NUMBER 139984.203

Brown AND Caldwell

Associates



ALIGNMENT VIEW



MW-109S	Dec-09	Nov-10	Mar-11
BTEX	1	ND	ND
PAHs	ND	ND	ND
TCN	ND	ND	ND
FCN	ND	ND	ND

MW-102	Jul-05	Dec-08	Apr-09	Dec-09	Nov-10	Mar-11
BTEX	NS	NS	**2838**	**1809**	NS	**1155**
PAHs	NS	NS	**2961**	**2063**	NS	**2166**
TCN	NS	NS	76	82	NS	54
FCN	NS	NS	3 J	4 J	NS	ND

MW-106S	Dec-08	Apr-09	Dec-09	Nov-10	Mar-11
BTEX	NS	NS	NS	NS	NS
PAHs	NS	NS	NS	NS	NS
TCN	NS	NS	NS	NS	NS
FCN	NS	NS	NS	NS	NS

MW-106D	Dec-08	Apr-09	Dec-09	Nov-10	Mar-11
BTEX	NS	NS	NS	NS	NS
PAHs	NS	NS	NS	NS	NS
TCN	NS	NS	NS	NS	NS
FCN	NS	NS	NS	NS	NS

MW-102R	Nov-10	Mar-11
BTEX	**8850**	**2910**
PAHs	**2521**	**962**
TCN	ND	ND
FCN	ND	4J

MW-106R	Nov-10	Mar-11
BTEX	**11068**	**3756**
PAHs	**1471**	**256**
TCN	60	43
FCN	ND	ND

MW-109D	Dec-09	Nov-10	Mar-11
BTEX	ND	ND	ND
PAHs	ND	ND	ND
TCN	ND	ND	ND
FCN	ND	ND	ND

0 50 100
SCALE IN FEET
HORIZONTAL

0 5 10
SCALE IN FEET
VERTICAL

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

(7.48) — WATER TABLE, MARCH 2011 (DASHED WHERE INFERRED)

WATER ELEVATION, 03-28-11

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)

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

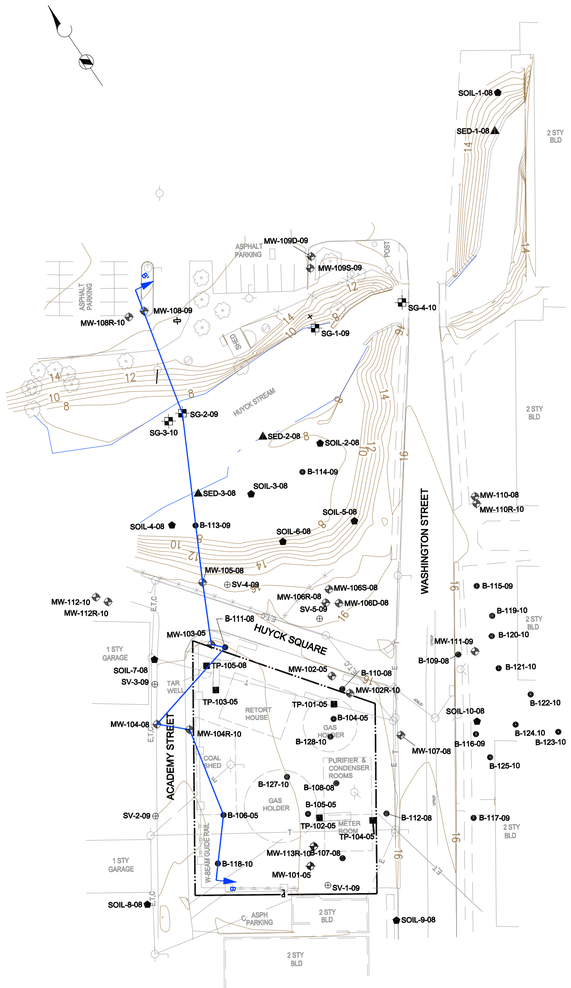
REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 3
HYDROGEOLOGIC CROSS-SECTION A-A'

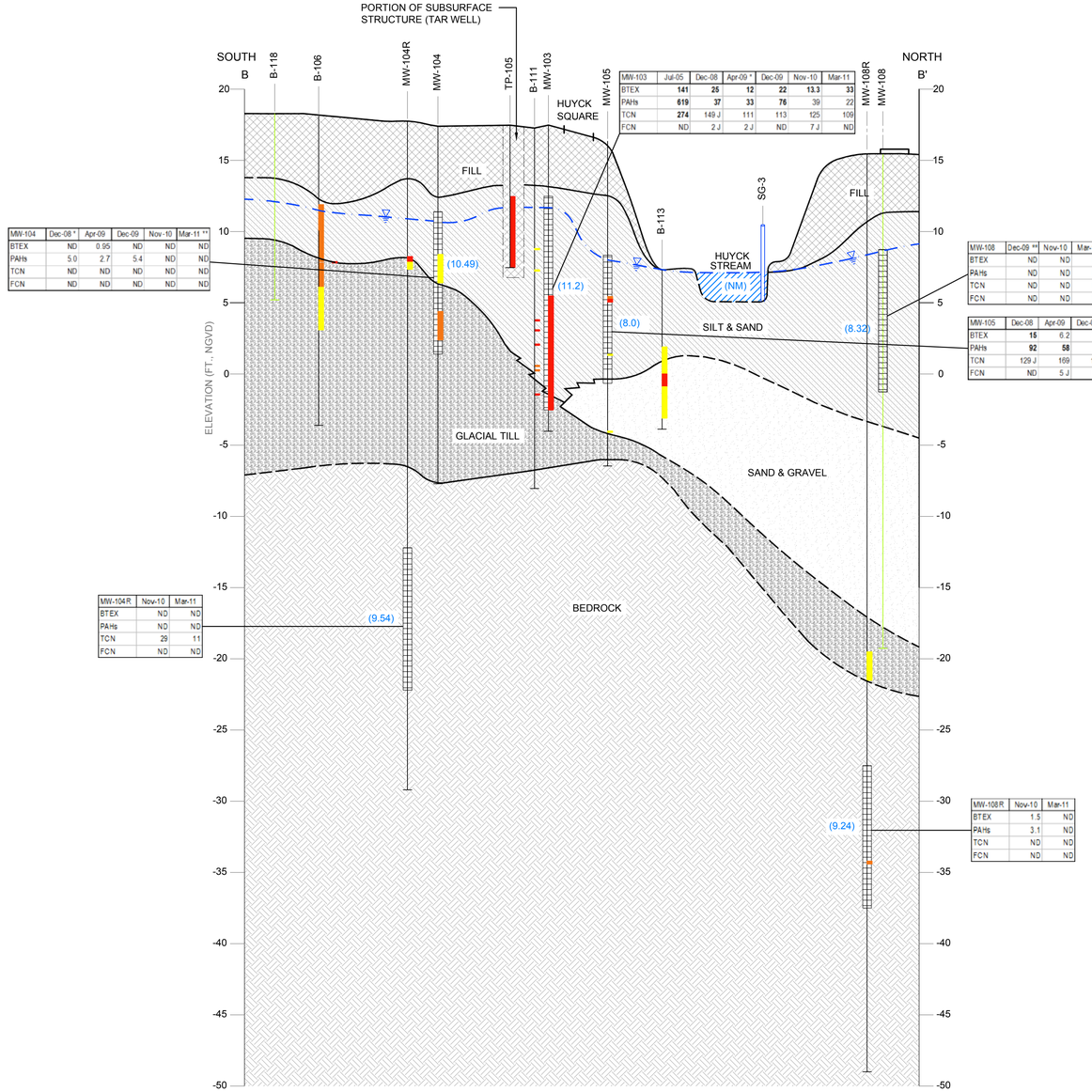
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME: -
BC PROJECT NUMBER: 139984.203
CLIENT PROJECT NUMBER:
DRAWING NUMBER: -
SHEET NUMBER: OF

Jul 20, 2011 - 2:49pm jjames
P:\DRAFTING\NATIONAL_GRID\RENSSELAER\RI Data Summary Report\Figure-3.dwg



ALIGNMENT VIEW



MW-104	Dec-08 *	Apr-09	Dec-09	Nov-10	Mar-11 **
BTEX	ND	0.95	ND	ND	ND
PAHs	5.0	2.7	5.4	ND	ND
TCN	ND	ND	ND	ND	ND
FCN	ND	ND	ND	ND	ND

MW-103	Jul-05	Dec-08	Apr-09 *	Dec-09	Nov-10	Mar-11
BTEX	**141**	**25**	**12**	**22**	**13.3**	**33**
PAHs	**619**	**37**	**33**	**76**	39	22
TCN	**274**	149 J	111	113	125	109
FCN	ND	2 J	2 J	ND	7 J	ND

MW-108	Dec-09 **	Nov-10	Mar-11
BTEX	ND	ND	ND
PAHs	ND	ND	ND
TCN	ND	ND	ND
FCN	ND	ND	ND

MW-105	Dec-08	Apr-09	Dec-09	Nov-10	Mar-11
BTEX	**15**	6.2	2.8	2.0	0.32
PAHs	**92**	**58**	**92**	**82**	29
TCN	129 J	169	124	48	74
FCN	ND	5 J	ND	ND	ND

MW-104R	Nov-10	Mar-11
BTEX	ND	ND
PAHs	ND	ND
TCN	29	11
FCN	ND	ND

MW-108R	Nov-10	Mar-11
BTEX	1.5	ND
PAHs	3.1	ND
TCN	ND	ND
FCN	ND	ND

0 50 100
SCALE IN FEET
HORIZONTAL

0 5 10
SCALE IN FEET
VERTICAL

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, MARCH 2011 (DASHED WHERE INFERRED)
(7.48) WATER ELEVATION, 3-28-2011

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

** DUPLICATE SAMPLE COLLECTED

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
NM	NOT MEASURED

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

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 4
HYDROGEOLOGIC CROSS-SECTION B-B'

RENSSELAER NON-OWNED
FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME: -
BC PROJECT NUMBER: 139984.203
CLIENT PROJECT NUMBER:
DRAWING NUMBER: -
SHEET NUMBER: OF

Jul 26, 2011 - 3:06pm jjames
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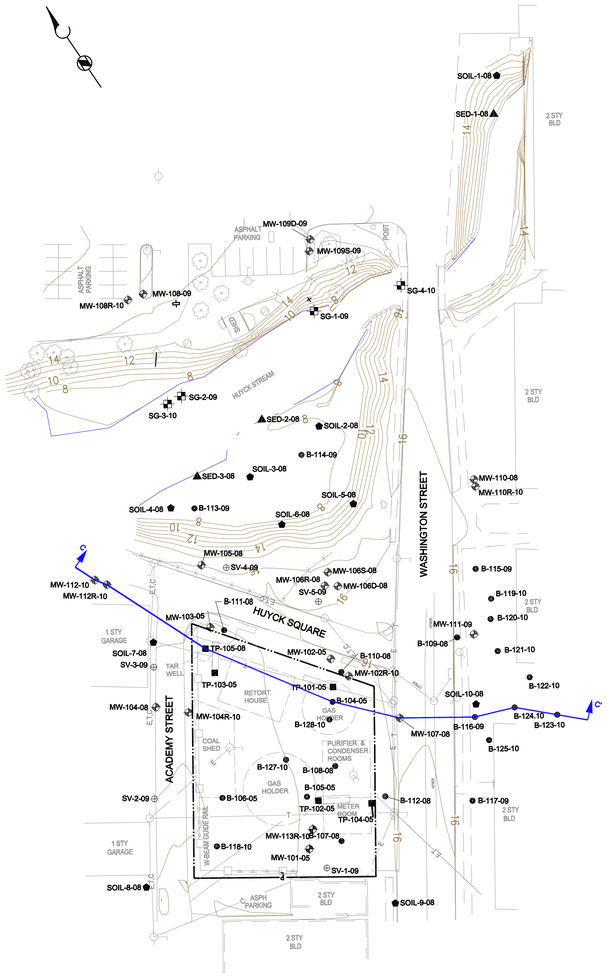
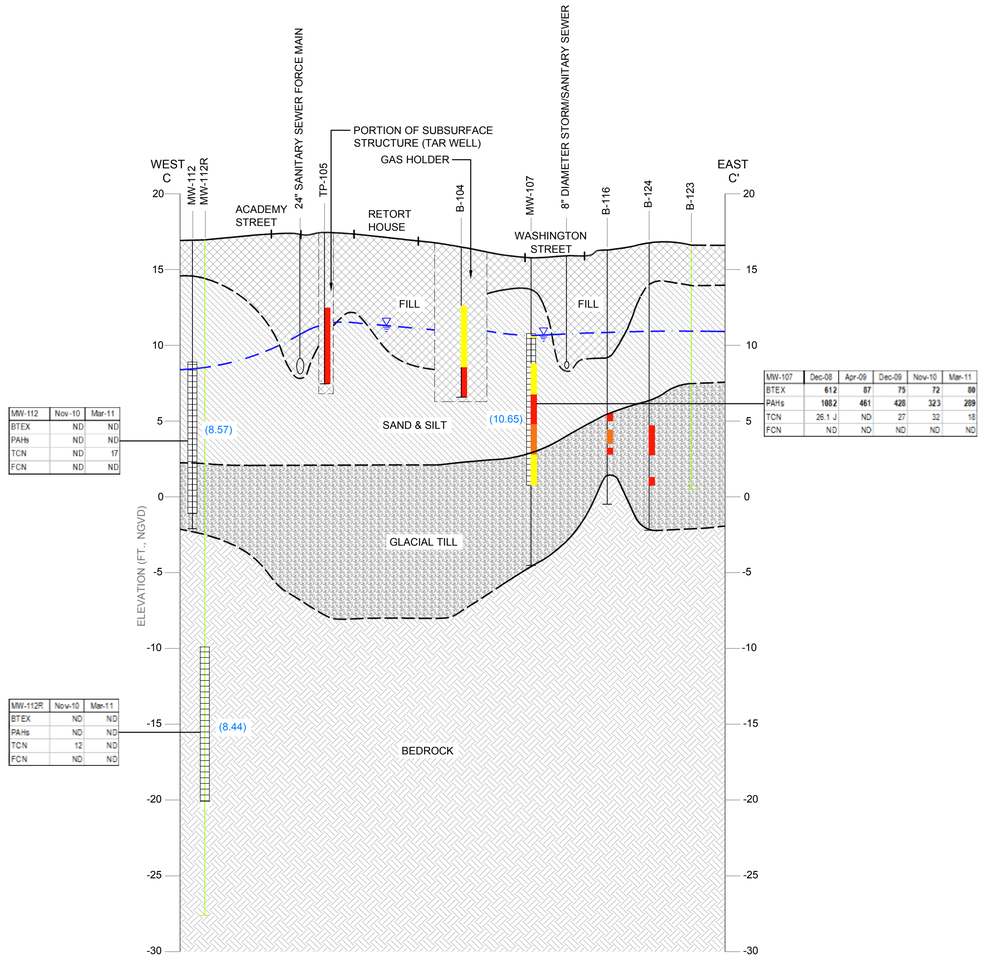


ALIGNMENT VIEW



MW-112	Nov-10	Mar-11
BTEX	ND	ND
PAHs	ND	ND
TCN	ND	17
FCN	ND	ND

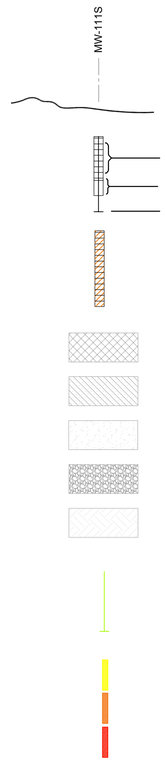
MW-112R	Nov-10	Mar-11
BTEX	ND	ND
PAHs	ND	ND
TCN	12	ND
FCN	ND	ND

MW-107	Dec-08	Apr-09	Dec-09	Nov-10	Mar-11
BTEX	**612**	**87**	**75**	**72**	**80**
PAHs	**1082**	**461**	**420**	**323**	**289**
TCN	26.1 J	ND	27	32	18
FCN	ND	ND	ND	ND	ND

0 50 100
SCALE IN FEET
HORIZONTAL

0 5 10
SCALE IN FEET
VERTICAL

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, MARCH 2011 (DASHED WHERE INFERRED)

WATER ELEVATION, 03-28-11

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)

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

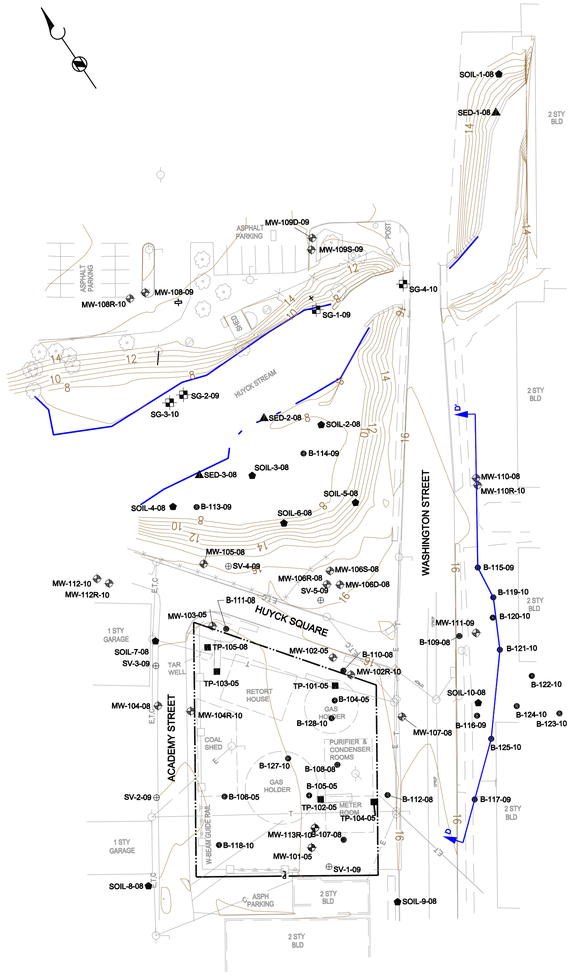
REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 5
HYDROGEOLOGIC CROSS-SECTION C-C'

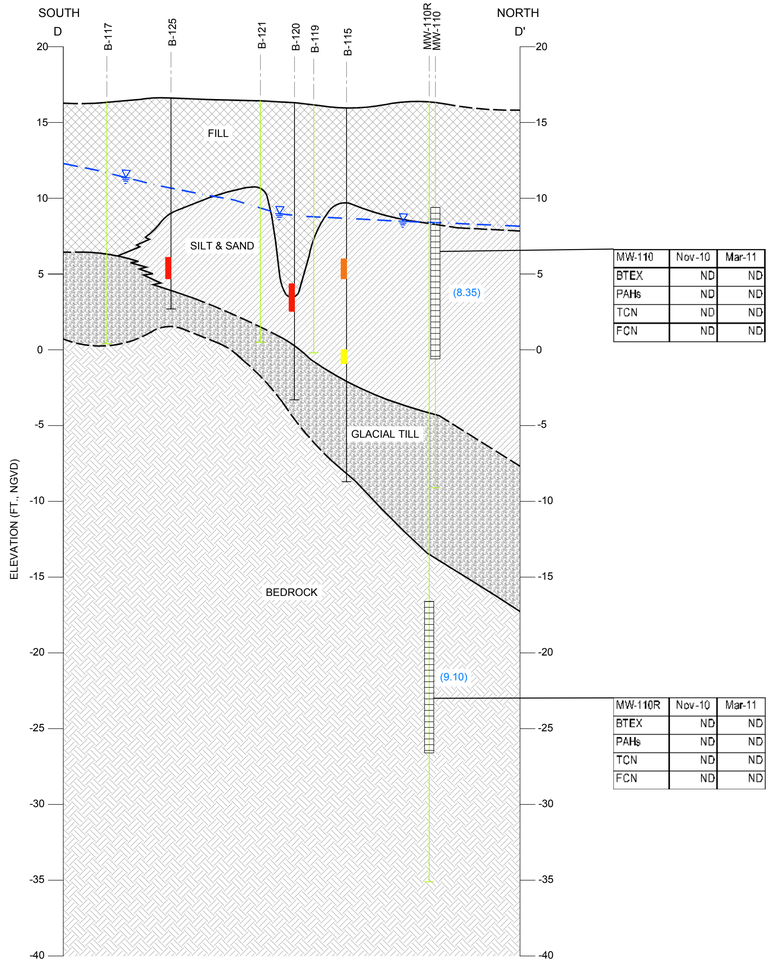
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME	-
BC PROJECT NUMBER	139984.203
CLIENT PROJECT NUMBER	
DRAWING NUMBER	-
SHEET NUMBER	OF

Jul 26, 2011 - 2:59pm jjames
P:\DRAFTING\NATIONAL_GRID\RENSSELAER\RSI Data Summary Report\Figure 5.dwg



ALIGNMENT VIEW



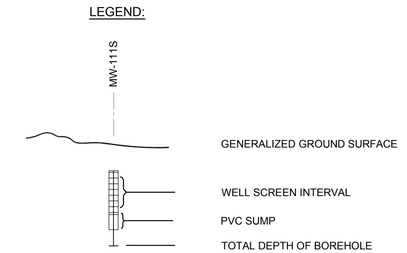
MW-110	Nov-10	Mar-11
BTEX	ND	ND
PAHs	ND	ND
TCN	ND	ND
FCN	ND	ND

MW-110R	Nov-10	Mar-11
BTEX	ND	ND
PAHs	ND	ND
TCN	ND	ND
FCN	ND	ND

0 50 100
SCALE IN FEET
HORIZONTAL

0 5 10
SCALE IN FEET
VERTICAL

LEGEND:



MW-110R	Nov-10	Mar-11
BTEX	ND	ND
PAHs	ND	ND
TCN	ND	ND
FCN	ND	ND

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

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

REVISIONS					
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

FIGURE 6
HYDROGEOLOGIC CROSS-SECTION D-D'

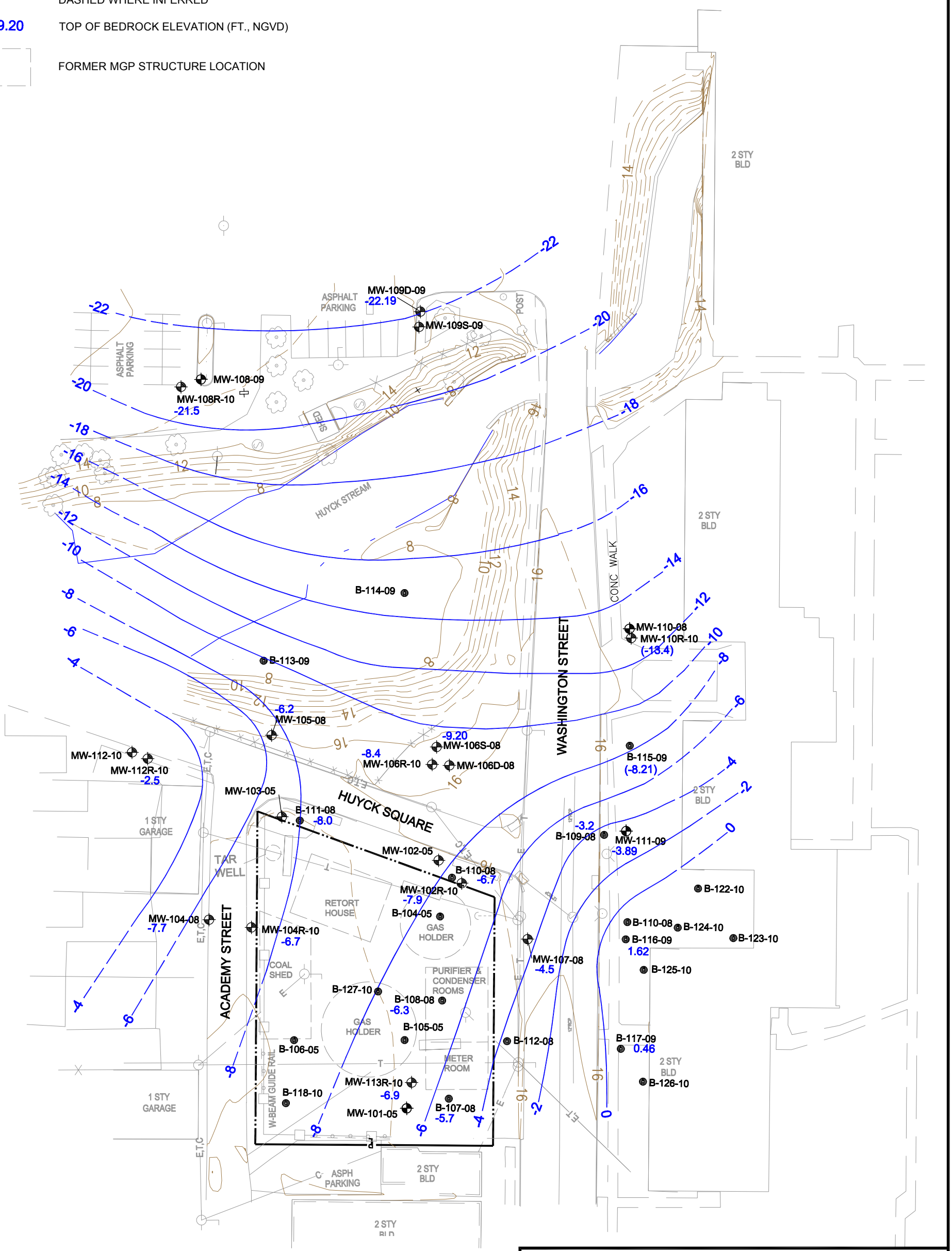
RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

FILENAME -
BC PROJECT NUMBER 139984.203
CLIENT PROJECT NUMBER
DRAWING NUMBER -
SHEET NUMBER OF

Jul 26, 2011 - 2:39pm rjames
P:\DRAFTING\NATIONAL_GRID\RENSSELAER\RI Data Summary Report\Figure 6.dwg

LEGEND:

- MONITORING WELL
- SOIL BORING
- PAVEMENT EDGE
- GROUND SURFACE ELEVATION CONTOUR (FT., NGVD)
- PROPERTY LINE
- -16 — TOP OF BEDROCK ELEVATION CONTOUR (FT., NGVD) DASHED WHERE INFERRED
- -9.20 — TOP OF BEDROCK ELEVATION (FT., NGVD)
- FORMER MGP STRUCTURE LOCATION



0 50 100

SCALE IN FEET

FIGURE 7

TOP OF BEDROCK SURFACE CONTOUR MAP

RENSSELAER NON-OWNED
FORMER MGP SITE
RENSSELAER, NEW YORK

DATE	PROJECT NUMBER
6/11	139984.203

Brown AND Caldwell
ASSOCIATES

P:\DRAFTING\NATIONAL_GRID\RENSSELAER\SRI DATA SUMMARY REPORT\FIGURE 7 (WTCS_ 2010).DWG 07/26/2011 03:30:06PM By:rjames XREFS: Basemap_2-4-10 Layout: Layout1

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
- 9.01 — WATER ELEVATION (FT., NGVD)
- 7.95 — GROUNDWATER HEAD ELEVATION (FT., NGVD) FOR WELLS SCREENED BELOW WATER TABLE
- NM — NOT MEASURED
- FORMER MGP STRUCTURE LOCATION
- GENERALIZED DIRECTION OF GROUNDWATER FLOW

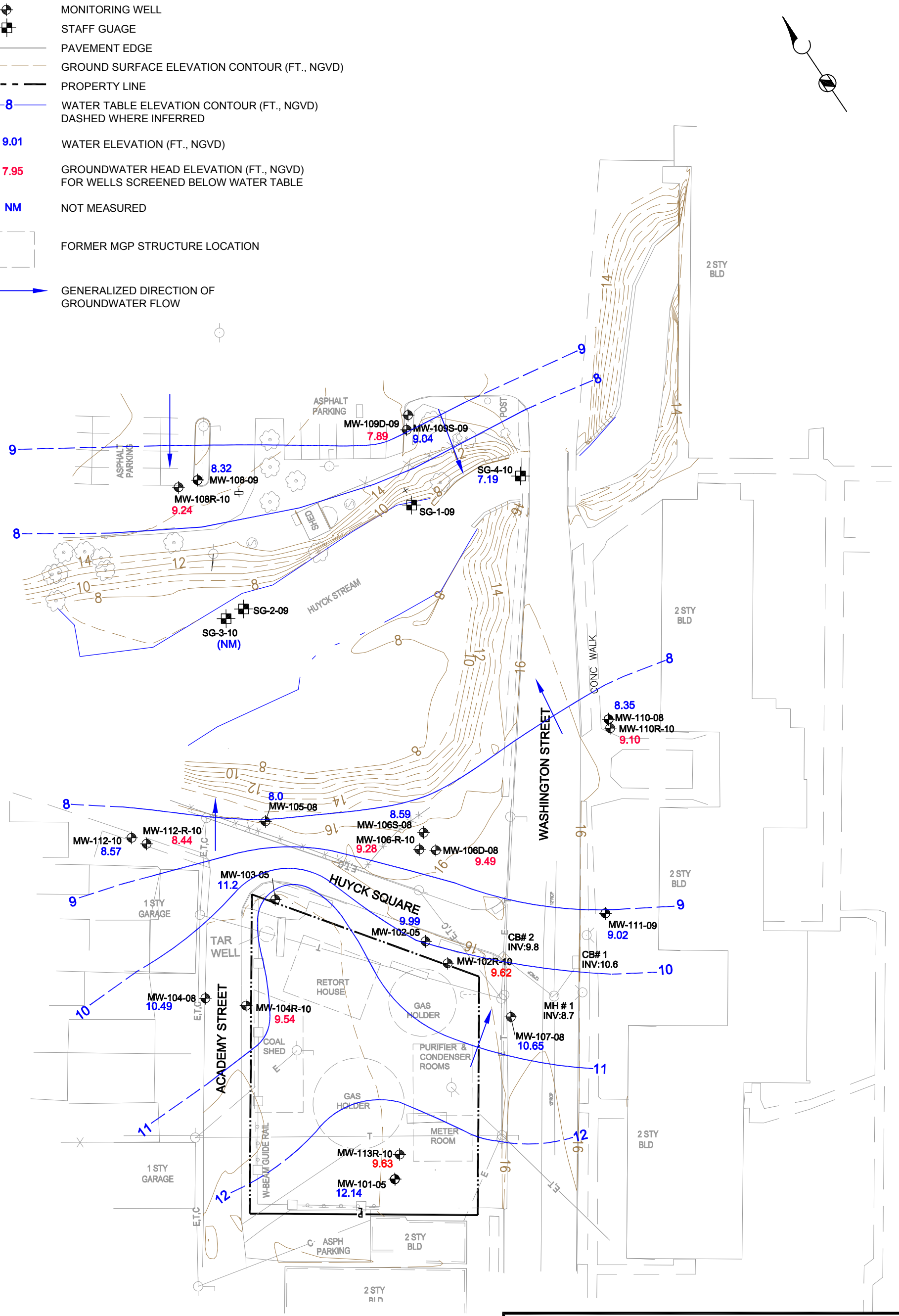


FIGURE 8

WATER TABLE CONTOUR MAP

MARCH 28, 2011

	DATE	PROJECT NUMBER
RENSSELAER NON-OWNED FORMER MGP SITE RENSSELAER, NEW YORK	6/11	139984.203

Brown AND Caldwell ASSOCIATES

P:\DRAFTING\NATIONAL_GRID\RENSSELAER\SRI DATA SUMMARY REPORT\FIGURE 8 (WTCS_MARCH_28, 2011).DWG 07/26/2011 02:55:11PM By:rjames XREFS: Basemap_2-4-10 Layout: Layout1

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

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

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-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

B-119-10	4-6	8-10
Total BTEX	ND	0.04497
Total PAHs	ND	**77**
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-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

B-120-10	12-14	16-18
Total BTEX	0.00715	ND
Total PAHs	**13**	ND
Total Cyanide	ND	ND
Free Cyanide	0.0277J	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-106S08	16-18	22-24
Total BTEX	0.44	**75**
Total PAHs	**57**	**494**
Total Cyanide	ND	ND
Free Cyanide	ND	ND

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

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

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

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-122-10	4-6	10-12
Total BTEX	ND	ND
Total PAHs	ND	ND
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

B-124-10	14-16	17-19
Total BTEX	0.0522	ND
Total PAHs	**212**	ND
Total Cyanide	ND	ND
Free Cyanide	ND	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-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

B-123-10	4-6	10-12
Total BTEX	ND	ND
Total PAHs	ND	ND
Total Cyanide	ND	ND
Free Cyanide	ND	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-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

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

B-128-10	4-6*	8-10
Total BTEX	**22**	**61**
Total PAHs	**170**	**1646**
Total Cyanide	0.65	14.1
Free Cyanide	ND	ND

B-125-10	10-12	12-14
Total BTEX	0.0028	0.00036
Total PAHs	**730**	0.043
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-127-10	4-6	8-10
Total BTEX	**111**	**217**
Total PAHs	**116**	**1038**
Total Cyanide	2.91	0.23
Free Cyanide	0.462J	ND

B-118-10	4-6	10-12
Total BTEX	ND	0.00047
Total PAHs	0.044	ND
Total Cyanide	ND	ND
Free Cyanide	ND	ND

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

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

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

HUYCK STREAM
HUYCK SQUARE
WASHINGTON STREET
TAR WELL
ACADEMY STREET
RETORT HOUSE
GAS HOLDER
COAL SHED
PURIFIER & CONDENSER ROOMS
GAS HOLDER
METER ROOM

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)
- Hand Auger Boring: 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

FIGURE 9
BTEX, PAHs, AND CYANIDE CONCENTRATIONS IN SUBSURFACE SOIL FROM SC AND RI SOIL SAMPLES

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 06/01/11
PROJECT NUMBER 139984.203

Brown AND Caldwell
Associates

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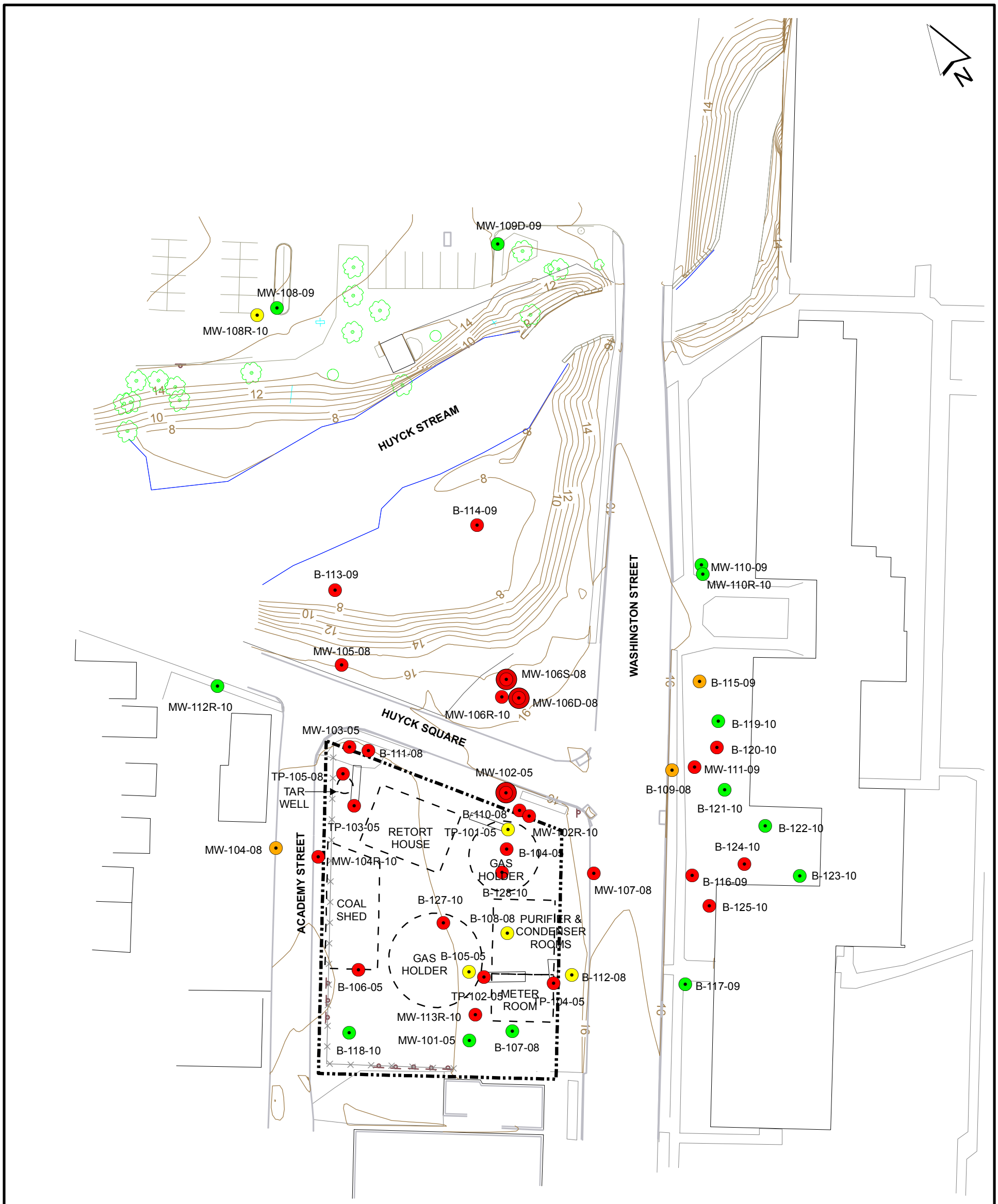

Legend

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

- 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 2 for descriptions and depth intervals of NAPL observations and to Figures 4 through 6 (Hydrogeologic Cross-Sections) for vertical position of observations.

0 25 50 100 Feet

FIGURE 10

VISUAL/OLFACTORY OBERVATIONS

RENSSELAER NON-OWNED FORMER MGP SITE RENSSELAER, NEW YORK

DATE 6/3/11

PROJECT NUMBER 139984.203

Brown AND Caldwell Associates

P:/GIS/National_Grid/Rensselaer_Visual&Olfactory_observations_SRI_1210.mxd

N

MW-109D-09	12/7/2009	11/16/2010	3/29/2011
Benzene	ND	ND	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-109S-09	12/7/2009	11/15/2010	3/29/2011
Benzene	ND	ND	ND
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
o-Xylene	0.3 J	ND	ND
m&p-Xylenes	0.71 J	ND	ND
Naphthalene	ND	ND	ND

MW-108-09	12/8/2009**	11/16/2010	3/28/2011
Benzene	ND	ND	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-105-08	12/18/2008	4/28/2009	12/8/2009	11/19/2010	3/31/2011
Benzene	**4 J**	0.81 J	0.4 J	0.40 J	0.32J
Toluene	0.4 J	ND	ND	ND	ND
Ethylbenzene	4 J	2.4 J	1.2 J	0.75 J	ND
o-Xylene	**6 J**	2.5 J	1.2 J	0.87 J	ND
m&p-Xylenes	1 J	0.52 J	ND	ND	ND
Naphthalene	**19**	**11**	1.3 J	1.6 J	2J

MW-110-09	12/9/2009	11/16/2010	3/29/2011
Benzene	ND	ND	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-103-05	7/6/2005	12/19/2008	4/27/2009 *	12/8/2009	11/17/2010	3/30/2011
Benzene	**2 J**	**3 J**	**1.8 J**	**4.8 J**	**5.1**	**1.7**
Toluene	0.95 J	0.3 J	ND	ND	0.28 UJ	ND
Ethylbenzene	**91**	**8 J**	4.4 J	**12**	**5.6**	2
o-Xylene	**36**	3 J	2.1 J	4.8 J	2.6	0.69
m&p-Xylenes	**11**	0.5 J	0.37 J	0.59 J	ND	ND
Naphthalene	ND	**10 J**	3.1 J	5.7 J	2.4 J	ND

MW-111-09	12/9/2009	11/16/2010**	3/28/2011
Benzene	ND	ND	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-112-10	11/17/2010	3/30/2010
Benzene	ND	ND
Toluene	ND	ND
Ethylbenzene	ND	ND
o-Xylene	ND	ND
m&p-Xylenes	ND	ND
Naphthalene	ND	ND

MW-102-05	7/6/2005	12/18/2008	4/28/2009	12/9/2009	11/15/2010	3/31/2011
Benzene	NS	NS	**630**	**540**	NS	**340**
Toluene	NS	NS	**58**	**39**	NS	**45**
Ethylbenzene	NS	NS	**720**	**660**	NS	**430**
o-Xylene	NS	NS	**270**	**230**	NS	**160**
m&p-Xylenes	NS	NS	**360**	**340**	NS	**180**
Naphthalene	NS	NS	**2500**	**2400**	NS	**1700**

MW-104-08	12/18/2008**	4/27/2009	12/8/2009	11/16/2010	3/30/2011**
Benzene	ND	0.95 J	ND	ND	ND
Toluene	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND
m&p-Xylenes	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND

MW-107-08	12/19/2008	4/28/2009	12/9/2009	11/18/2010	3/30/2011
Benzene	**89**	**9.7 J**	**9.3 J**	**17**	**29**
Toluene	**6 J**	1.1 J	ND	ND	1.7
Ethylbenzene	**300**	**41**	**40**	**32**	**28**
o-Xylene	**97**	**16**	**12**	**11**	**9.1**
m&p-Xylenes	**120**	**19**	**14**	**12**	**12**
Naphthalene	**850**	**260**	**190**	**130**	**87**

MW-101-05	7/6/2005**	12/18/2008	4/27/2009	12/9/2009	11/17/2010	3/30/2011
Benzene	ND	0.6 J	0.36 J	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND
m&p-Xylenes	ND	ND	ND	ND	ND	ND
Naphthalene	ND	1 J	ND	ND	ND	ND

HUYCK STREAM

HUYCK SQUARE

WASHINGTON STREET

ACADEMY STREET

MW-106S-08

MW-106D-08

TAR WELL

RETORT HOUSE

GAS HOLDER

COAL SHED

GAS HOLDER

PURIFIER CONDENSER ROOMS

METER ROOM

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
** - Duplicate sample collected

Results reported in micrograms per liter (µg/L)

0 25 50 100 Feet

FIGURE 11

BTEX AND NAPHTHALENE CONCENTRATIONS IN OVERBURDEN GROUNDWATER

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 05/20/2011

PROJECT NUMBER 139984.203

Brown AND Caldwell

Associates

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N

MW-109D-09	12/7/2009	11/16/2010	3/29/2011
Total Cyanide	ND	ND	ND
Free Cyanide	ND	ND	ND

MW-109S-09	12/7/2009	11/15/2010	3/29/2011
Total Cyanide	ND	ND	ND
Free Cyanide	ND	ND	ND

MW-108-09	12/8/2009**	11/16/2010	3/28/2011
Total Cyanide	ND	ND	ND
Free Cyanide	ND	ND	ND

MW-105-08	12/18/2008	4/28/2009	12/8/2009	11/19/2010	3/31/2011
Total Cyanide	129 J	169	124	48	74
Free Cyanide	ND	5 J	ND	ND	ND

MW-103-05	7/6/2005 *	12/19/2008	4/27/2009 *	12/8/2009	11/17/2010	3/30/2011
Total Cyanide	**274**	149 J	111	113	125	109
Free Cyanide	ND	2 J	2 J	ND	7 J	ND

MW-112-10	11/17/2010	3/30/2011
Total Cyanide	ND	17
Free Cyanide	ND	ND

MW-110-09	12/9/2009	11/16/2010	3/29/2011
Total Cyanide	ND	ND	ND
Free Cyanide	ND	ND	ND

MW-111-09	12/9/2009	11/16/2010*	3/28/2011
Total Cyanide	ND	ND	ND
Free Cyanide	ND	ND	ND

MW-102-05	7/6/2005	12/18/2008	4/28/2009	12/10/2009	11/15/2010	3/31/2011
Total Cyanide	NS	NS	76	82	NS	54
Free Cyanide	NS	NS	3 J	4 J	NS	ND

MW-104-08	12/18/2008**	4/27/2009	12/8/2009	11/16/2010	3/30/2011**
Total Cyanide	ND	ND	ND	ND	ND
Free Cyanide	ND	ND	ND	ND	ND

MW-107-08	12/19/2008	4/28/2009	12/9/2009	11/18/2010	3/30/2011
Total Cyanide	26.1 J	ND	27	32	18
Free Cyanide	ND	ND	ND	ND	ND

MW-101-05	7/6/2005*	12/18/2008	4/27/2009	12/9/2009	11/17/2010	3/30/2011
Total Cyanide	195	**235 J**	**266**	**260**	**228**	**217**
Free Cyanide	NA	ND	3 J	8 J	7 J	4J

MW-106S-08

MW-106D-08

HUYCK STREAM

HUYCK SQUARE

WASHINGTON STREET

ACADEMY STREET

TAR WELL

RETORT HOUSE

GAS HOLDER

COAL SHED

GAS HOLDER

PURIFIER & CONDENSER ROOMS

METER ROOM

Legend

- Monitoring well where total cyanide concentration is below Class GA Criteria
- Monitoring well where total cyanide concentration is 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:
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
** - Duplicate sample collected

Results reported in micrograms per liter (µg/L)

0 25 50 100 Feet

FIGURE 12

CYANIDE CONCENTRATIONS IN OVERBURDEN GROUNDWATER

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 5/20/2011

PROJECT NUMBER 139984.203

Brown AND Caldwell

Associates

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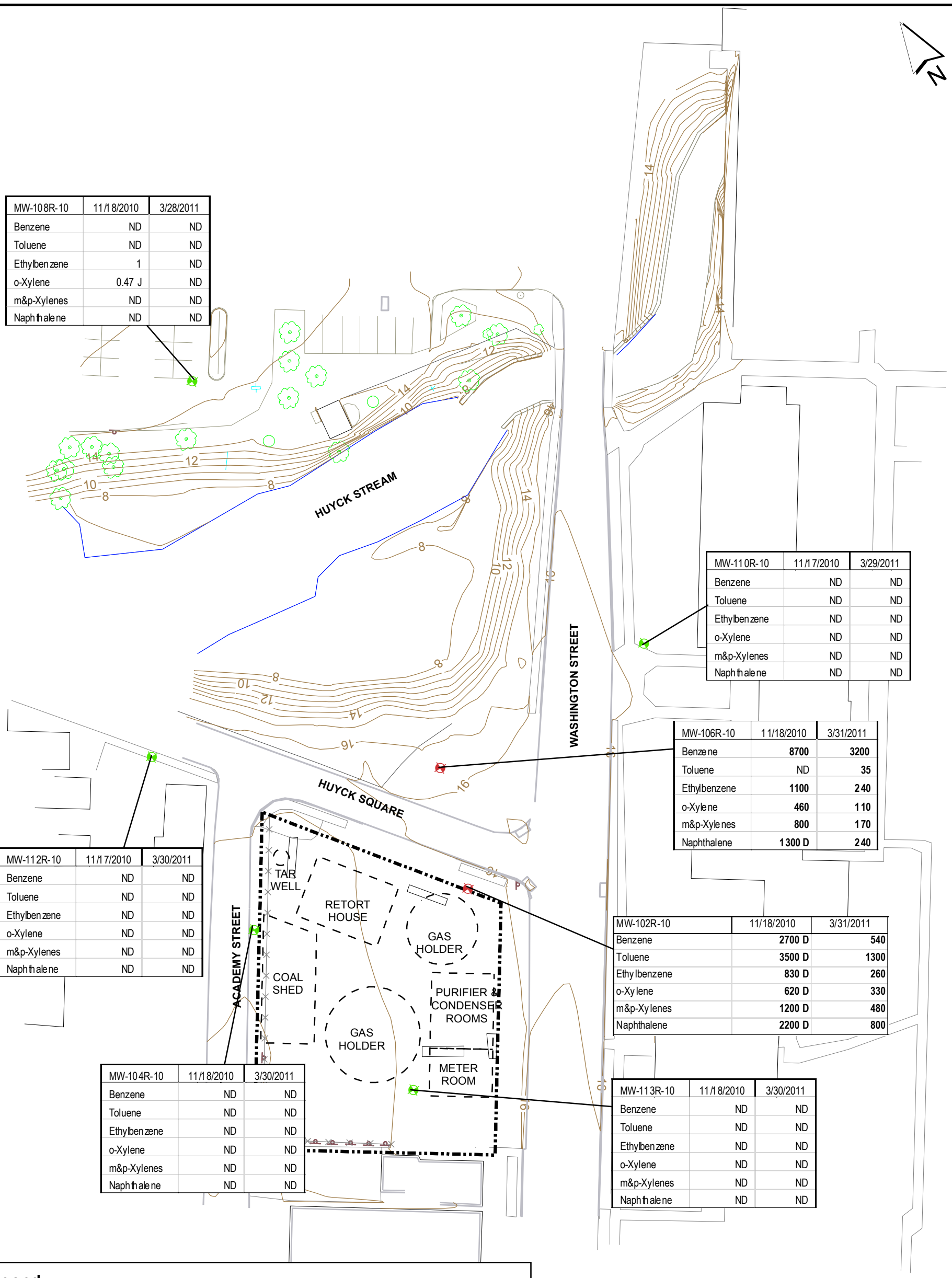

FIGURE 13

BTEX AND NAPHTHALENE CONCENTRATIONS IN BEDROCK GROUNDWATER

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 05/20/2011

PROJECT NUMBER 139984.203

Brown AND Caldwell

Associates

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MW-108R-10	11/18/2010	3/28/2011
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-110R-10	11/17/2010	3/29/2011
Total Cyanide	ND	ND
Free Cyanide	ND	ND

MW-106R-10	11/18/2010	3/31/2011
Total Cyanide	60	43
Free Cyanide	ND	ND

MW-112R-10	11/17/2010	3/30/2011
Total Cyanide	12	ND
Free Cyanide	ND	ND

MW-102R-10	11/18/2010	3/31/2011
Total Cyanide	ND	ND
Free Cyanide	ND	4J

MW-113R-10	11/18/2010	3/30/2011
Total Cyanide	ND	ND
Free Cyanide	ND	4J

MW-104R-10	11/18/2010	3/30/2011
Total Cyanide	29	11
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

Legend

- Monitoring well where total cyanide concentration is above Class GA Criterion
- Monitoring well where total cyanide concentration is below Class GA Criterion
- 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

Results reported in micrograms per liter (µg/L)

0 25 50 100 Feet

FIGURE 14

CYANIDE CONCENTRATIONS IN BEDROCK GROUNDWATER

RENSSELAER NON-OWNED FORMER MGP SITE
RENSSELAER, NEW YORK

DATE 05/20/2011

PROJECT NUMBER 139984.203

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:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-118-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	13.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/2/10 - 11/2/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695227.5 ft. Vert Datum: NGVD 1988 Northing: 1387568.9 ft. Ground Surface Elev: 18.2 ft. TOC Elev: --	

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	PID Readings (ppm)	Remarks
		SM	**Fill** Asphalt		1					0	*0.0-113.5' - Borehole backfilled with cement/ bentonite grout*
		GP	Brown f SAND, some Silt.								
	15	SP	Brown/dark gray mf GRAVEL, some cmf Sand, little Silt. dry								
		SM	Brown/tan mf SAND and Silt, little mf Gravel. moist		2					0	B-118-10-(4'-6') Sample submitted for laboratory analysis
5			**Sand and Silt**								
	10	GP	Brown c GRAVEL		3					0	
		SM	**Glacial Till**								
		GP	Brown mf SAND, some Silt. wet								
10		SP	Light brown cmf GRAVEL, some mf Sand, little Silt.								B-118-10-(10'-12') Sample submitted for laboratory analysis
	5				4					0	
											Geoprobe Refusal @ 13.5'

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-119-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	16.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/1/10 - 11/1/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695469.4 ft. Vert Datum: NGVD 1988 Northing: 1387599.3 ft. Ground Surface Elev: 16.2 ft. TOC Elev: --	

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	PID Readings (ppm)	Remarks
	15	SM	**Fill** Brown mf SAND, some Silt.		1					0	*0.0-16' - Borehole backfilled with cement/bentonite grout.*
		CL ML	Brown f SAND, some (+) Silt. Brown/tan Silty CLAY, trace f Sand. dry								
		GM	Brown/gray mf GRAVEL, some Silt, little f Sand.								
		CL ML	Brown/tan Silty CLAY, trace f Sand. Firm, moist		2					0	
5		CL ML	Brown/tan Silty CLAY, trace f Sand. Firm, moist								B-119-10-(4'-6') Sample submitted for laboratory analysis
	10	GP SP	Dark gray mf GRAVEL, some f Sand, trace Silt.								
		CL ML	Brown/tan Silty CLAY, trace f Sand. Firm, moist		3					0	
		SM SC	**Sand and Silt** Gray f SAND, some Clayey Silt.								B-119-10-(8'-10') Sample submitted for laboratory analysis
10	5	GP SP	Brown/gray mf GRAVEL, some c Sand, little Silt. Wet								
		SM	Gray f SAND, some (+) Silt.		4					0	
15		CL ML	Gray Clayey SILT, some f Sand. Wet								

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-120-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	19.6 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/1/10 - 11/1/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695461.5 ft. Vert Datum: NGVD 1988 Northing: 1387588.5 ft. Ground Surface Elev: 16.4 ft. TOC Elev: --	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Backfill	PID Readings (ppm)	Remarks
	15	SM	**Fill** Brown mf SAND, some Silt.		1		0	*0.0-19.6' Borehole backfilled with cement/bentonite grout.*
		GP SP	Brown/dark gray mf GRAVEL, some mf Sand. (brick/slag)					
5		GP SP	Brown/dark gray mf GRAVEL, some mf Sand. (brick/slag)		2		0.6	
	10							
		GP SP	Brown/dark gray mf GRAVEL, some mf Sand. (brick/slag) wet @ 9'		3		0	
10								
	5							
		GP SP	Brown/dark gray mf GRAVEL, some mf Sand. (brick/slag)		4		5.9	12-13.8' BGS: Sporadic NAPL blebs coating coarse-grained soils (sand and gravel), sheen, moderate tar-like odor.
		SM	**Sand and Silt** Gray mf SAND, some Silt.					
15		CL ML	Gray Silty CLAY. Small pieces of wood, wet					B-120-10-(12'-14') Sample submitted for laboratory analysis
	0	CL/ML	**Glacial Till**		5		0	
		GP CL ML	Brown/gray Silty CLAY, some cmf Gravel, some mf Sand. Gravel well rounded. Gray c GRAVEL. Large rock Gray/brown Silty CLAY, some mf Gravel, some mf Sand. Gravel well rounded, wet					B-12-10-(16'-18') Sample submitted for laboratory analysis

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-121-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	16.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/1/10 - 11/1/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695453.2 ft. Vert Datum: NGVD 1988 Northing: 1387568.5 ft. Ground Surface Elev: 16.5 ft. TOC Elev: --	

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	PID Readings (ppm)	Remarks
	15	SM	**Fill** Brown mf SAND, some Silt.		1					0	*0.0-16' Borehole backfilled with cement/bentonite grout*
		SP GP	Brown f SAND, some (+) Silt, trace f Gravel.								
			Dark gray mf SAND, some (+) f Gravel, trace Silt. moist								
5		SP GP	Dark gray mf SAND, some (+) f Gravel, trace Silt. moist		2					0	B-121-10-(4'-6') Sample submitted for laboratory analysis
	10	SC SM	**Sand and Silt** Brown/tan f SAND and Silty CLAY. moist								
		SC SM	Brown/tan f SAND, some (+) Silty CLAY, little (+) mf Gravel. Gravel well rounded. Soft and wet		3					0	B-121-10-(8'-10') Sample submitted for laboratory analysis
10	5										
		SC SM	Brown/tan f SAND, some (+) Silty CLAY, little (+) mf Gravel. Gravel well rounded. Soft and wet, saturated @ 12'		4					0	
15											

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-122-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	16.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/1/10 - 11/1/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695460.6 ft. Vert Datum: NGVD 1988 Northing: 1387542.3 ft. Ground Surface Elev: 16.6 ft. TOC Elev: --
J. Schweitzer	Direct-push	Geoprobe 6610DT	

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	PID Readings (ppm)	Remarks
	15	SM	**Fill** Brown mf SAND, some (-) Silt.		1					0	*0.0-16' - Borehole backfilled with cement/bentonite grout*
		GP SP	Brown mf SAND, some Silt, little mf Gravel.								
			Brown/gray mf GRAVEL, some mf Sand. Moist								
		SM	Brown f SAND, some (+) Clayey Silt.		2					0	
5		SC SP	Orange/brown mf SAND, little f Gravel, little Silt.								B-122-10-(4'-6') Sample submitted for laboratory analysis
	10	GP	**Sand and Silt**								
		SM	Brown f SAND and SILT.								
		ML	Brown/tan Clayey SILT, little f Sand. Firm and wet		3					0	
		ML CL									
		CL ML	Brown/tan Clayey SILT, little f Sand. Firm and wet								B-122-10-(8'-10') Sample submitted for laboratory analysis
10		CL									
		CL ML	Brown/tan Silty CLAY, little f Sand, little mf Gravel. Gravel well rounded. Soft and wet								
	5	SM			4					0	
		SC	Brown mf SAND, some Silt. Dry								
		SM	Brown/tan mf SAND, some Silty Clay, little mf Gravel. Gravel well rounded, firm and wet.								
15											

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-123-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	16.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/2/10 - 11/2/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695461.4 ft. Vert Datum: NGVD 1988 Northing: 1387511.6 ft. Ground Surface Elev: 16.5 ft. TOC Elev: --
J. Schweitzer	Direct-push	Geoprobe 6610DT	

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	PID Readings (ppm)	Remarks
		SM	**Fill**		1					0	*0.0-16' - Borehole backfilled with cement/bentonite grout.*
	15	SM	Brown mf SAND, little Silt.								
		ML	Brown f SAND and SILT.								
		SP GP	Dark brown mf SAND, little f Gravel, little Silt.								
		SM	**Sand and Silt**								
		SM	Brown mf SAND, some (+) Silt. Moist		2					0	
5			Brown mf SAND, some (+) Silt. Moist								B-123-10-(4'-6') Sample submitted for laboratory analysis
	10	SM ML	Light brown f SAND and SILT. Soft and wet								
					3					0	
		SM GM	**Glacial Till**								
10			Tan mf SAND, some (+) cmf Gravel, some Silt. Gravel well rounded, firm and wet.								
	5		Soft between 12.9 13.7' Color change to dark brown @ 13.9'		4					0	B-123-10-(10'-12') Sample submitted for laboratory analysis
15											

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-124-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	19.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/2/10 - 11/2/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695441.0 ft. Vert Datum: NGVD 1988 Northing: 1387531.6 ft. Ground Surface Elev: 16.8 ft. TOC Elev: --	

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	PID Readings (ppm)	Remarks
		SM	**Fill**		1					0	*0.0-19' - Borehole backfilled with cement/bentonite grout*
		SM	Brown mf SAND, little Silt.								
	15	ML	Brown f SAND and SILT								
		GP SP	Dark brown mf GRAVEL and cmf SAND, little Silt.								
			Sand and Silt								
		SM	Brown f SAND, some (+) Silt. Moist		2					0	
5											
	10										
					3					0	
10											
		SM	**Glacial Till**								
	5		Brown mf SAND, some (+) Silt, little mf Gravel. Gravel well rounded, wet.		4					32.7	12-14' BGS: Sporadic ocurrences of NAPL blebs and sheens within soils
15											15.5-16' BGS: NAPL coating coarse sand and gravel, strong tar-like odor.
	0				5					0	B-124-10-(14'-16') Sample submitted for laboratory analysis
		SP	Brown/tan mf SAND, some f Gravel, little								B-124-10-(17'-19') Sample submitted for laboratory analysis
		GP	Silt. Gravel well rounded								
		GP SP	Gray mf GRAVEL, little f Sand, little Silt								Geoprobe refusal @ 19'

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-125-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	14.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/2/10 - 11/2/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695414.9 ft. Vert Datum: NGVD 1988 Northing: 1387523.6 ft. Ground Surface Elev: 16.7 ft. TOC Elev: --	

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	PID Readings (ppm)	Remarks
		SM	**Fill** Brown mf SAND, little Silt.		1					0	*0.0-14' - Borehole backfilled with cement/bentonite grout*
	15	SM	Brown mf SAND, some (+) Silt.								
		GP	Orange/red c Gravel. Brick								
		SM	Brown mf SAND, some Silt.								
		SM	Brown mf SAND, some Silt. Small pieces of coal @ 4.4'		2					0	
5											
	10										
		SM	**Sand and Silt** Brown/tan f SAND, some Silt, little mf Gravel. Gravel rounded, moist. Wet @ 11'		3					5.2	
10											10.6-12' BGS: NAPL coating coarse sand and gravel, strong tar-like odor.
	5										B-125-10-(10'-12') Sample submitted for laboratory analysis
		SP GP CL ML	**Glacial Till** Brown mf SAND, some (+) cm Gravel (well rounded) little Silt. Gray/brown Silty CLAY, some cmf Gravel, little f Sand. Very firm, wet.		4					0	B-125-10-(12'-14') Sample submitted for laboratory analysis Geoprobe refusal @ 14'

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-127-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	12.4 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/2/10 - 11/2/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:		
J. Schweitzer	Direct-push	Geoprobe 6610DT	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695297.6 ft. Vert Datum: NGVD 1988 Northing: 1387589.6 ft. Ground Surface Elev: 17.3 ft. TOC Elev: --	

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	PID Readings (ppm)	Remarks
		SP GP	**Fill** Asphalt Brown/gray mf SAND, some f Gravel, little Silt. Brick/concrete. moist		1					1 1.5	*0.0-13' - Borehole backfilled with cement/bentonite grout*
5	15	SP GP	Brown/gray mf SAND, some f Gravel, little Silt. Brick/concrete. moist		2						B-127-10-(5'-7') Sample submitted for laboratory analysis
		ML CL	Dark brown/gray Clayey SILT, some f Sand.								5.6-12.4' BGS: Fill materials saturated with groundwater and NAPL, strong tar-like odor.
10	10	SP GP	Brown/tan cmf SAND, some mf Gravel, little Silt.		3					40.1 41.4	
		SP	Brown mf SAND, litte Silt.								B-127-10-(10'-12') Sample submitted for laboratory analysis
	5	GP	Brick		4					121.9 132	Geoprobe Refusal @ 13'

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BORING LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Boring No.** B-128-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	3"	NA	NA"	9.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Macro Core	Development Method:
11/2/10 - 11/2/10	Nothnagle Drilling	Hammer Type:	

Driller:	Drilling Method:	Drilling Equipment:	
J. Schweitzer	Direct-push	Geoprobe 6610DT	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695336.3 ft. **Vert Datum:** NGVD 1988 **Northing:** 1387595.0 ft. **Ground Surface Elev:** 16.7 ft. **TOC Elev:** --

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	PID Readings (ppm)	Remarks
			Fill								
		SM	Asphalt		1					0	*0.0-9' - Borehole backfilled with cement/bentonite grout*
	15	SP	Brown/gray mf SAND, little Silt.								
		GP	Brown/gray cmf SAND, some cmf Gravel, little Silt. Wet @ 2.9'								
		SP	Brown/gray cmf SAND, some cmf Gravel, little Silt. wet		2						B-128-10-(4'-6') Sample submitted for laboratory analysis
5		GP								19.7	4.7-5.3' BGS: Fill materials saturated with groundwater and NAPL, strong tar-like odor
	10										B-128-10-(8'-10') Sample submitted for laboratory analysis
		SP	Brown/gray cmf SAND, some cmf Gravel, little Silt. wet		3					32.6	8-9' BGS: Fill materials saturated with groundwater and NAPL, strong tar-like odor.
		GP									Geoprobe refusal @ 9'

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MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-102R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	46.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Cont. Core	Development Method:
10/28/10 - 11/2/10	Nothnagle Drilling	Hammer Type: NA	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:		
N. Short	HSA/Conventinal Core	CME-75	Horiz Datum/Proj: NYS Plane (NAD83/96)	Easting: 695363.1 ft.
			Vert Datum: NGVD 1988	Northing: 1387611.2 ft.
			Ground Surface Elev: 16.3 ft.	TOC Elev: 15.9 ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well (Traffic Rated Vault Box)	PID Readings (ppm)	Remarks
	15		Split spoon samples not collected. Refer to MW-102 boring log for description of soils.								*0-1': Concrete Pad*
5	10										
10	5										*1-23': Cement/Bentonite grout*
15	0										NAPL coating on bottom 10' of hollow-stem augers, strong tar-like odor; NAPL coating outside of augers from approximately 13-23' BGS.
20	-5		**Bedrock**								
25	-10		Deformed gray/black shale. Heavily fractured from 26-26.7', 27.2-27.4' and 30.5-31.0'. Fractures @ 27.9, 28.5, 29.9 and 30.2'. Pyrite found in heavily fractured area @ 26.2'. Verticle cacite vein @ 26-26.2'. Large 1/4" thick piece of calicite @ 30.9'. Highly weathered @ 27.3'	48%	1					0	*23-24': #00 Choker Sand* *24-27': Bentonite Seal* *26': Base of 4" Steel Casing*
30											

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MONITORING WELL LOG

Brown AND Caldwell	Project Name: Rensselaer Non-Owned Former MGP Project Number: 139984.202 Project Location: Rensselaer, NY	Permit Number: NA	Well No. MW-102R-10 Page 2 of 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well	PID Readings (ppm)	Remarks
35			Deformed gray/black shale. Fractures @ 31.6, 32.0, 32.2, 32.3, 32.5, 32.6, 33.0, 33.4, 34.3, 34.8, 35.2 and 35.6'. Large verticle calcite vein from 31-31.6' over 1" thick. Monderately weathered on fracture surfaces.	76%	2					0	*27-38.3': #1 Filter Sand* *28-38': 0.020" Slot PVC Screen*
	-20		Deformed gray/black shale. Fractures @ 36.2, 36.5, 37, 37.4, 38.7, 39.8, 40.3, 40.9'. Moderate weathering @ 37.4'	92%	3					0	
40											*38-40': 2' PVC sump with bentonite in the annular space between borehole and sump*
	-25		Deformed gray/black shale. Fractures @ 41.3, 42.6, 43.4, 45.3 and 45.9' Indications of displacement (slicks) on smooth facture surfaces @ 43.4 and 45.3'	93%	4					0	*38.3-46': Bentonite Backfill*
45											

MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-104R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	47.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: 2" SS/Cont. Core	Development Method:
10/26/10 - 11/1/10	Nothnagle Drilling	Hammer Type: Auto 140lbs	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695262.7 ft. Vert Datum: NGVD 1988 Northing: 1387652.1 ft. Ground Surface Elev: 17.9 ft. TOC Elev: 17.6 ft.
N. Short	HSA/Conventinal Core	CME-75	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	PID Readings (ppm)	Remarks
		SM	**Fill** Asphalt	3-4-3/.1	1		0	*0-1': Concrete Pad*
			Brown/tan mf SAND, little Silt. Dry					
	15	GM	Brown/tan Clayey SILT, some cm Gravel, little Sand. Firm, small pieces of brick, dry.	4-3-4-4	2		0	
		ML CL	**Sand and Silt** Dark brown/gray Clayey SILT, trace f Sand. Moist	1-2-1-1	3		0	
5				2-3-2-4	4		0	
	10	SM SC	Brown mf SAND, some (+) Clayey Silt. Moist	2-3-23-30	5		17.2	
		CL ML	**Glacial Till** Gray green Silty CLAY, little mf Gravel, trace f Sand. Gravel well rounded and flat.	8-30-58/0.25	6		18.2	9.6-10' BGS: NAPL coating coarse-grained layer of sand and gravel within glacial till unit, moderate to strong tar-like odor; 10-10.5' BGS: Moderate tar-like odor.
10		GP	Gray c GRAVEL.					
	5	CL ML	Brown/tan Silty CLAY, little(+) mf Gravel, trace f Sand. Gravel well rounded and flat, moist.	16-18-23-30	7		0	*1-25': Cement/Bentonite grout*
		CL ML	Brown/tan Silty CLAY, little(+) mf Gravel, trace f Sand. Gravel well rounded and flat, moist.	16-24-26-22	8		0	
15		GP	Gray c GRAVEL, some Silty CLAY. moist	10-15-20-25	9		0	
		CL ML	Gray/dark gray Silty CLAY, little (+) mf Gravel, trace f Sand. Dense, gravel well rounded and flat.					
	0			10-22-23-29	10		0	
20				9-20-25-28	11		0	
	-5			12-22-30-38	12		0	
		GC	Gray Silty CLAY, some cmf Gravel.	50/0.5	13		0	
25			**Bedrock**					*25-26': #00 Choker Sand* *26-28.5': Bentonite Seal*
	-10		Deformed gray/black shale. Fractures @ 27.7, 28.1, 28.4, 28.7, 29.4, 29.9, 30, 31.1 and 31.5' Heavily fractured from 31.5 to 32' Pyrite on fractured surfaces @ 30, 31.1 and 31.5 to 32' Moderate weathering @ 28.4'	77%	1		0	*27': Base of 4" Steel Casing*
30								

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MONITORING WELL LOG

Brown AND Caldwell	Project Name: Rensselaer Non-Owned Former MGP Project Number: 139984.202 Project Location: Rensselaer, NY	Permit Number: NA	Well No. MW-104R-10 Page 2 of 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well	PID Readings (ppm)	Remarks
35	-15		Deformed gray/black shale. Fractures @ 32.3, 32.7, 32.8, 33.3, 33.6, 33.8, 34, 34.2, 34.4, 34.5, 34.7, 35, 35.4, 35.5, 35.8, 36.1, and 36.7' Pyrite on fracture surfaces @ 32.7 and 36.7' Moderate weathering from 34.3 to 34.5'	32%	2		0	*28.5-40.3': #1 Filter Sand* *30-40': 0.020" Slot PVC Screen*
40	-20		Deformed gray/black shale. Fractures @ 37.2, 37.6, 37.8, 38.8, 39, 39.5, 40.2, 40.3, 40.4, 40.9, 41, 41.5, 41.7 and 4.9' Highly weathered from 37.8 to 38'	42%	3		0	
45	-25		Deformed gray/black shale. Fractures @ 42.3, 42.7, 42.9, 43.2, 43.4 and 43.7' Heavily fractured from 46 to 47' Indications of displacement (slicks) on smooth fracture surface @ 43.9'	67%	4		0	*40-42': 2' PVC sump with bentonite in the annular space between borehole and sump* *40.3-47': Bentonite Backfill*

MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-106R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	44.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Cont. Core	Development Method:
10/28/10 - 11/2/10	Nothnagle Drilling	Hammer Type: NA	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:	Horiz Datum/Proj: NYS Plane (NAD83/96) Easting: 695384.3 ft. Vert Datum: NGVD 1988 Northing: 1387669.2 ft. Ground Surface Elev: 18.6 ft. TOC Elev: 18.1 ft.
N. Short	HSA/Conventinal Core	CME-75	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Stick Up)	PID Readings (ppm)	Remarks
			Split spoon samples not collected. Refer to MW-106S/D boring logs for description of soils.					*0-1': Concrete pad*
5	15							
10	10							
15	5							*1-27': Cement/Bentonite grout* NAPL coating outside of augers from approximately 11-15' BGS and observed sporadically on outside of augers from approximately 15-27' BGS
20	0							
25	-5							*27-28': #00 Choker Sand* *28-30': Bentonite Seal*
30	-10		Deformed gray/black shale. Fractures @ 29.3, 39.6, 30.1, 30.2, 31.1, 31.4, 32.9, 33.3, 33.6 and 33.8' Pyrite on fracture surface @	62%	1		0	*29': Base of 4" Steel Casing*

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MONITORING WELL LOG

Brown AND Caldwell	Project Name: Rensselaer Non-Owned Former MGP Project Number: 139984.202 Project Location: Rensselaer, NY	Permit Number: NA	Well No. MW-106R-10 Page 2 of 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well	PID Readings (ppm)	Remarks
			30.1' Smooth fracture surfaces @ 30.1 and 30.2' Indications of displacement (slicks) @ 30.2'								
	-15										
35			Deformed gray/black shale. Intensely fractured from 38.4 to 39' Heavily fractured @ 34 to 34.6' Fractures @ 34.8, 35.4, 35.9, 36, 36.3, 36.6, 36.8, 36.9, 37, 37.1, 37.4 and 38.1' Moderately weathered @ 34.8 and 37.1'	35%	2					0	*30-41.3': #1 Filter Sand* *31-41': 0.020" Slot PVC Screen* 36.5' BGS: Sheen and tar-like odors observed in return water during coring process for 34-39' BGS interval.
	-20										
40			Deformed gray/black shale. Fractures @ 39.2, 39.8, 40.8, 41.2, 41.6, 42.5, 42.8 and 43.8'	88%	3					0	*41-43': 2' PVC sump with bentonite in the annular space between borehole and sump* *41.3-44': Bentonite Backfill*
	-25										

MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-108R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Chaturgan/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	64.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling: Cont. Core	Development Method:
10/12/10 - 10/20/10	Nothnagle Drilling	Hammer Type: NA	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:		
N. Short	HSA/Conventinal Core	CME-75	Horiz Datum/Proj: NYS Plane (NAD83/96)	Easting: 695385.8 ft.
			Vert Datum: NGVD 1988	Northing: 1387898.1 ft.
			Ground Surface Elev: 15.5 ft.	TOC Elev: 15.0 ft.

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well (Traffic Rated Vault Box)	PID Readings (ppm)	Remarks
	15		Split spoon samples not collected. Refer to MW-108 boring log for description of soils.								*0-1': Concrete Pad*
5	10										
10	5										*1-38': Cement/Bentonite grout*
15	0										
20	-5										
25	-10										
30	-15										

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MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-108R-10 **Page** 2 **of** 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well	PID Readings (ppm)	Remarks
35	-20		**Bedrock**					35-37' BGS: Faint tar-like odor observed from base of overburden soils
								38-39': #00 Choker Sand
40	-25		Gray/black highly weathered, highly fractured, deformed shale, completely fragmented.	0%	2		0	*39.5': Base of 4" Steel Casing* *39-41': Bentonite Seal*
45	-30		Gray/black highly weathered, highly fractured deformed shale. @ 45.0 pyrite deposits on fractured surface. @45.3' inclined (moderate to high) fractures, indications of displacement (slicks) on smooth fractured surface. @ 45.7 inclined fracture, pyrite and quartz on fracture surface. @ 46.3 and 46.8 pyrite on fracture surface. @ 48.9' and 49.15' pyrite on fracture surface. @ 47.2' partially decomposed rock, silt and clay present on fracture surface.	23.3%	3		0	*41-53.3': #1 Filter Sand*
								43-53': 0.020" Slot PVC Screen
50	-35			71.7%	4		0.2	49.8' BGS: Small spot of sheen with tar-like odor observed on outside of core.
55	-40		Gray deformed shale. @ 50.2 silica (quartz) deposit in fracture. @ 50.9' inclined fracture. @ 51.35' inclined fracture with indications of displacement (slicks) @ 21.7' inclined surface, smooth. From 53.9 to 54.6' intensely fractured and highly weathered. @ 54.3' partially decomposed rock. Silt and clay present of fractured surface.	71.7%	5		0	*53-55': 2' PVC sump with bentonite in the annular space between borehole and sump*
60	-45		Gray/black highly fractured and moderately weathered shale. Intensely fractured from 54.1 to 55.1' Inclined fractured cleavage @ 56, 57.15, 56.6, 57.2, 57.5, 57.7, 58.35, 58.6, 58.8, 59.4' @ 55.2' and 55.6' idicators of displacement on fractured surface. Slicks with pyrite deposits. @ 56, 56.6, 58.2' pyrite deposits on fracture surface. Most of the inclined folded cleavage surfaces are smooth toward end of run. @ 59' intensely fractured and highly weathered with slight decomposition with silt and clay deposits.	60%	1		0	
			Gray/balck deformed shale. Slight to moderate angle fracture and slight to moderate weathering. Fracture/folded cleavage @ 60, 60.1, 60.2, 60.85, 61.1, 61.7, 62.2, 62.9, 63.1, 63.4, 63.6' and from 64-64.6' intensely fractured and highly weathered. Pyrite on fractured surface @ 60.1, 60.2, 60.85, 61.1, 63.1'					*55-64.6': Bentonite Backfill*

MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-110R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Chaturgan/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	51.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling: 2" SS/Cont. Core	Development Method:
10/14/10 - 10/20/10	Nothnagle Drilling	**Hammer Type:** Auto 140lbs	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:		
N. Short	HSA/Conventinal Core	CME-75	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695503.3 ft. **Vert Datum:** NGVD 1988 **Northing:** 1387666.0 ft. **Ground Surface Elev:** 16.4 ft. **TOC Elev:** 15.9 ft.	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well (Traffic Rated Vault Box)	PID Readings (ppm)	Remarks
	15		Split-spoon samples not collected, Refer to MW-110 boring log for description of soils.								*0-1': Concrete Pad*
5	10										
10	5										*1-29': Cement/Bentonite grout*
15	0										
20	-5										
25	-10										
		SP GP	Gray mfc SAND and fm GRAVEL, little (-) Clayey Silt. Gravel rounded to subangular,moist throughout.	12-26-14-20						0.1	
30		SP GP	Gray mfc SAND and fm GRAVEL, little (-) Clayey Silt. Gravel rounded to subangular,moist throughout.	50/0.2						0	*29-30': #00 Choker Sand*

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MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** **MW-110R-10** **Page** 2 **of** 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well	PID Readings (ppm)	Remarks
	-15		**Bedrock** Gray/dark gray weathered shale, intensely fractured Gray/black shale, deformed. @32.1' intensely fractured gray shale, numerous folded cleavage. @ 33.6' Intensely fractured and highly weathered.	10.8%			0	*30-32': Bentonite Seal* *31.5': Base of 4" Steel Casing*
35	-20		Gray/black shale, very deformed @ 36.8' Fractures @ 37.2, 37.5, 37.8, 38.1, 38.2, 38.7, 38.8' highly fractured from 37.2, 37.5, 38.8' Slight weathering and intensely fractured zone @ 39.4' Inclined fractured cleavage @ 39.5, 39.8 and 41.1'	49.2%			0.1	*32-43.3': #1 Filter Sand* *33-43': 0.020" Slot PVC Screen*
40	-25		Gray/black shale, deformed, intensely fractured from 42.2 to 42.5' Inclined cleavage fractures @ 42.8' Slight weathering @ 43.4 to 43.7' Intensely fractured and weathered @ 43.7 to 45.2' Highly fractured gray/black shale @ 45.2' Intensely fractured and slightly weathered from 45.7 to 46.5'	43%			0	*43-45': 2' PVC sump with bentonite in the annular space between borehole and sump*
45	-30		Gray/black shale, highly deformed. Fractures along cleavage planes @ 46.9, 47.3 and 48' From 48.5 to 49.1' highly fractured. Surface of fractures are smooth. @ 49.5' inclined fracture with pyrite deposits on fracture surface.	70%			0	*45-51.5': Bentonite Backfill*
50	-35							

MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-112-10 **Page** 1 **of** 1

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Chaturgan/Albany, NY	JLM	8.25"	2" PVC	.020"	19.0 ft.

Start/Finish Date	Drilling Contractor:	Sampling:	Development Method:
10/22/10 - 10/22/10	Nothnagle Drilling	**Hammer Type:** NA	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:		
N. Short	Hallow-Stem Auger	CME-75	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695262.1 ft. **Vert Datum:** NGVD 1988 **Northing:** 1387759.0 ft. **Ground Surface Elev:** 16.9 ft. **TOC Elev:** 16.5 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: Well	PID Readings (ppm)	Remarks
5 10 15	15 10 5 0		Split-spoon samples not collected. Refer to MW-112R boring log for description of soils.						Traffic Rated Vault Box		*0-1': Concrete Pad* *1-3': Cement/Bentonite grout* *3-3.5': #00 Choker Sand* *3.5-6': Bentonite Seal* *6-18.3': #1 Filter Sand* *8-18': 0.020" Slot PVC Screen* *18-19': 1' PVC sump with bentonite in the annular space between borehole and sump* *18.3-19': Bentonite Backfill*

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MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-112R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Chaturgan/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	44.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling:	Development Method:
10/15/10 - 10/21/10	Nothnagle Drilling	2" SS/Cont. Core **Hammer Type:** Auto 140lbs	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:		
N. Short	HSA/Conventinal Core	CME-75	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695266.9 ft. **Vert Datum:** NGVD 1988 **Northing:** 1387752.0 ft. **Ground Surface Elev:** 17.0 ft. **TOC Elev:** 16.6 ft.	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	PID Readings (ppm)	Remarks
			Fill Concrete	2-4	1		0	*0-1': Concrete Pad*
	15	ML	Black cinder type material.					
		CL	Brown/gray Clayey SILT, little (+) Sand,	3-3-3-3	2		0	
		SP	littler mf Gravel.					
			Sand and Silt					
5			Gray f SAND, trace Clayey SILT. Moist, iron staining through. @ 4' some organic material, possible root material	1-1-1-WH	3		0	
	10	SP	Gray/brown f SAND, trace (-) Clayey Silt. Iron staining throughout	1-1-2-2	4		0	
		SP	Gray/brown f SAND, trace (-) Clayey Silt. Iron staining throughout. Wet @ 8.8'	1-1-2-8	5		0	
10		SP	Brown/gray fm SAND, little (+) mf Gravel,	2-10-5-6	6		0	
		GP	liitle (-) Clayey Silt.					
	5	GP	Red brown/gray mfc SAND and mf					
		SP	GRAVEL, little (-) Clayey Silt.	2-3-3-6	7		0.1	*1-22': Cement/Bentonite grout*
		GP	Pulverized parts of gray c GRAVEL. gravel rounded to subrounded.					
		SP	Brown/gray mfc SAND and fm GRAVEL,	4-8-15-22	8		0.1	
15		GP	little (-) Clayey Silt. Fe stainging. Gravel rounded to subangular.					
		GP	Brown/gray mfc SAND and fm GRAVEL,					
	0	GP	little (-) Clayey Silt. Gravel consists of gray shale and occasional quartz.	18-35-32-50	9		0.1	
			Glacial Till					
		GP	Rounded c GRAVEL, core is compact and gravel is held together in sandy matrix.	36-48-28-50/.3	10		0	
20			C GRAVEL, core is dry. @ 18.8 pulverized shale cobbles.					
			C GRAVEL, very dense and compact	50/.3	11		0	
			Bedrock					
	-5		Gray weathered shale.					*23-23': #00 Choker Sand*
								23-25': Bentonite Seal
25			Gray/black shale, deformed and highly fractured. Slightly weathered. Inclined cleavage @ 24.7, 25, 25.3, 25.7, 25.9 and 26.3' At 26.7' inclined folded cleavage with pyrite deposits all along fractured surface, there is a 1/4" band of quartz deposit. ..... From 26.7 to 27.1' this section of core is less deformed. Pyrite observed along cleavage planes. @ 27.1' black deformed shale. @ 28.1 to 29.5' intensely fractured and highly weathered.	53%	1		0	*24.5': Base of 4" Steel Casing*
	-10							
30				23%	2		0	*25-37.3': #1 Filter Sand*

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MONITORING WELL LOG

Brown AND Caldwell	Project Name: Rensselaer Non-Owned Former MGP Project Number: 139984.202 Project Location: Rensselaer, NY	Permit Number: NA	Well No. MW-112R-10 Page 2 of 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int	Graphic Log: Recovery	Graphic Log: Lithology	Graphic Log: Well	PID Readings (ppm)	Remarks
	-15		29.5 to 30.9' Gray black shale, intensely fractured and slightly weathered. @ 30.9' gray black highly defored shale, fractures @ 31.4, 31.6, 31.8, 32.1, 32.5, 32.6, 32.9, 33.2, 33.3 and 33.5' Intensely fractured and highly weathered from 33.5 to 34.2'								*27-37': 0.020" Slot PVC Screen*
35			Gray/black deformed shale. Fractures @ 34.7, 35.2, 35.4, 35.6, 37, 37.2, 37.4, 37.75 and 38.1' Intensely fractured and weatherd from 38.1 to 39.5' decomposed shale (silt and clay) also present in this interval. Fracture surface smooth, @ 38.1 highly weathered fractures.	60%	3					0	
	-20										
40			Gray/black deformed shale. Fractured @ 39.7, 40.3, 40.4, 40.7, 41.1, 41.4, 41.5, 41.75, 42.1, 42.35, 42.4, 42.8, 43, 43.5, 43.8, 44.1 and 44.3'	53%	4					0	*37-39': 2' PVC sump with bentonite in the annular space between borehole and sump* *37.3-41.5': Bentonite Backfill*
	-25										

MONITORING WELL LOG

Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** MW-113R-10 **Page** 1 **of** 2

Geologist/Office	Checked By:	Borehole Diameter:	Screen Diameter and Type:	Slot Size:	Total Boring Depth (ft)
T. Joki/Albany, NY	JLM	8.25"/4"	2" PVC	.020"	46.5 ft.

Start/Finish Date	Drilling Contractor:	Sampling: 2" SS/Cont. Core	Development Method:
10/21/10 - 10/28/10	Nothnagle Drilling	**Hammer Type:** Auto 140lbs	Surge & Purge w/ Whale Pump

Driller:	Drilling Method:	Drilling Equipment:		
N. Short	HSA/Conventinal Core	CME-75	**Horiz Datum/Proj:** NYS Plane (NAD83/96) **Easting:** 695285.9 ft. **Vert Datum:** NGVD 1988 **Northing:** 1387541.9 ft. **Ground Surface Elev:** 17.1 ft. **TOC Elev:** 16.7 ft.	

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well (Traffic Rated Vault Box)	PID Readings (ppm)	Remarks
		SP	**Fill** Asphalt	3-5-7	1		0	*0-1': Concrete Pad*
	15	GP	Gray/brown mf SAND and cmf GRAVEL.					
		SP	Brown mf SAND, little (+) mf Gravel.	10-13-11-8	2		0	
		GP	Brown mf SAND, little (+) mf Gravel.					
		SP	Pulverized concrete debris					*1-31': Cement/Bentonite grout*
		GP	Tan/brown porous concrete.	1-1-1-2	3		9.2	
5		GP	**Sand and Silt**					4.7' BGS: Slight to moderate tar-like and petroleum-like odor
		SP	Brown fm SAND, trace (+) Clayey Silt.					
		ML	Brown/gray Clayey SILT, trace (+) f Sand.	24-29-10-9	4		5.9	5.2' BGS: Black staining with slight to moderate petroleum-like and tar-like odor
	10	CL	Moist					
		ML	Brown/gray Clayey SILT, trace (+) f Sand.					
		CL	Moist	3-10-29-41	5		39.4	6-8' BGS: Sporadic black staining with slight petroleum-like and tar-like odor
		SP	Gray/olive green fmc SAND and mf					
		GP	GRAVEL, little (+) Clayey Silt.					8-8.9' BGS: Sporadic blebs of NAPL and NAPL coating larger sand and gravel grains throughout, strong tar-like odor; no impacts observed in bedrock core samples.
10		SP	Gray/olive green fmc SAND and mf					
		GP	GRAVEL, little (+) Clayey Silt.	33-39-50/0.3	6			
		GP	Pulverized wet pieces of gray shale.					
	5	SP	**Glacial Till**					
		GP	Gray/olive green fmc SAND and mfc	37-50/0.3	7			
		SP	GRAVEL, little (-) clayey Silt. Gravel					
		GP	subrounded to sub angular.					
		GP	Brown fm SAND and fm GRAVEL, little	50/0.3	8			
15			(-) Silt.					
			Pulverized piece of shale. dry					
		GP	Pulverized piece of shale. wet	35-30-41-28	9		0.3	
	0							
		SM	Gray f SAND, little (+) Silty Clay, little (-)	6-23-50/0.3	10		0.6	
			fm Gravel. (Well rounded, subangluar, flat)					
		GP	Pulverized piece of gray shale. Very					
20			compact, tight and dense.	24-50/0.1	11			
		SM	Pulverized piece of gray shale. Very					
			compact, tight and dense.					
	-5							
		GP	Gray f SAND, little (+) Silty Clay, little (-) f	50/.3	12			
			Gravel. (flattened, rounded to subangular)					
			C GRAVEL					
			Bedrock	50/.3	13			
25			Pulverized shale, smooth surface.					
	-10		Deformed gray/black shale. Fractured @ 27, 27.5, 28, 28.3, 29.2 and 29.3' Highly fractured from 29.0 to 30.4' Intensely fractured from 31 to 31.5' Pyrite mineralization on fractured surface @ 30.4' Moderately weathered @ 29.4'	63%	1		0	*26.5': Base of 4" Steel Casing*
30								

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MONITORING WELL LOG

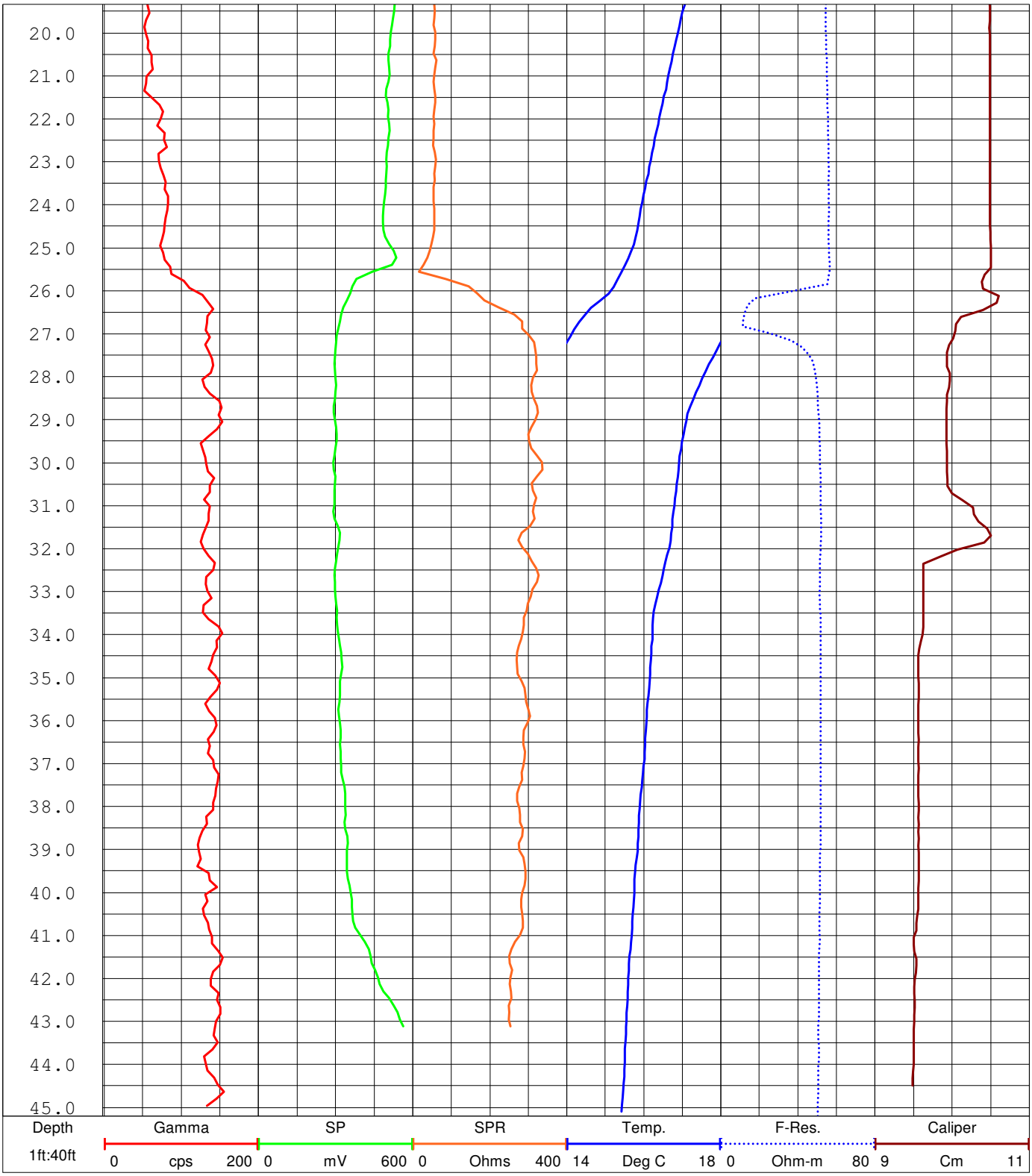
Brown AND Caldwell	**Project Name:** Rensselaer Non-Owned Former MGP **Project Number:** 139984.202 **Project Location:** Rensselaer, NY	**Permit Number:** NA	**Well No.** **MW-113R-10** **Page** 2 **of** 2

Depth (feet)	Elevation (feet)	USC Soil Type	Description	Blow Counts / RQD (%)	Sample No.	Graphic Log: Sample Int / Recovery / Lithology / Well	PID Readings (ppm)	Remarks
	-15		Deformed gray/black shale. Fractures @ 31.9, 32.4, 33.8, 34.8, 35.1, 35.5, 35.9 and 36.2' Intensely fractured and moderately weathered from 36.2 to 36.5' Pyrite on fracture surfaces @ 35.5 and 35.9' Most of the fracture surfaces are smooth and breaking along folded cleavage.	53%	2		0	*31-31.5': #00 Choker Sand* *31.5-34': Bentonite Seal*
35								
	-20		Deformed gray/black shale. Fractured @ 37.7, 39.5 and 39.8' Heavily fractured from 36.5 to 37.1' and 38 to 39.2' Intensely fractured from 40.4 to 41.2' Moderate weathering @ 38 and 41.2' Pyrite @ 40.7' Fracture surfaces are smooth and break along folded cleavage.	37%	3		0	*34-46.3': #1 Filter Sand*
40								
	-25		Severely fractured and deformed gray/black shale. Partially decomposed bedrock (Silt and Clay) @ 42.9 to 43.3' and 44.8 to 45.2' Subangluar fractured pieces.	0%	4		0	*36-46': 0.020" Slot PVC Screen*
45								*46-47': 1' PVC sump with bentonite in the annular space between borehole and sump* *46.3-47': Bentonite Backfill*

Appendix B: Geophysical Logs

Brown AND Caldwell

PROJECT:	*Rensselear Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-102R*	**SURFACE CASING:**	*Base of 4" steel casing: 26' BGS*
LOCATION:	*Rensselear, NY*	**BOREHOLE DIAMETER:**	*4" from 26-46' BGS*
TEST DATE:	*10/29/10*	**PERSONNEL:**	*TMJ*
NORTHING:	*1387611.2*	**G.S. ELEV:**	*16.3*
EASTING:	*695363.1*	**DEPTH LOGGED:**	*0.5-46'*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Depth
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Gamma
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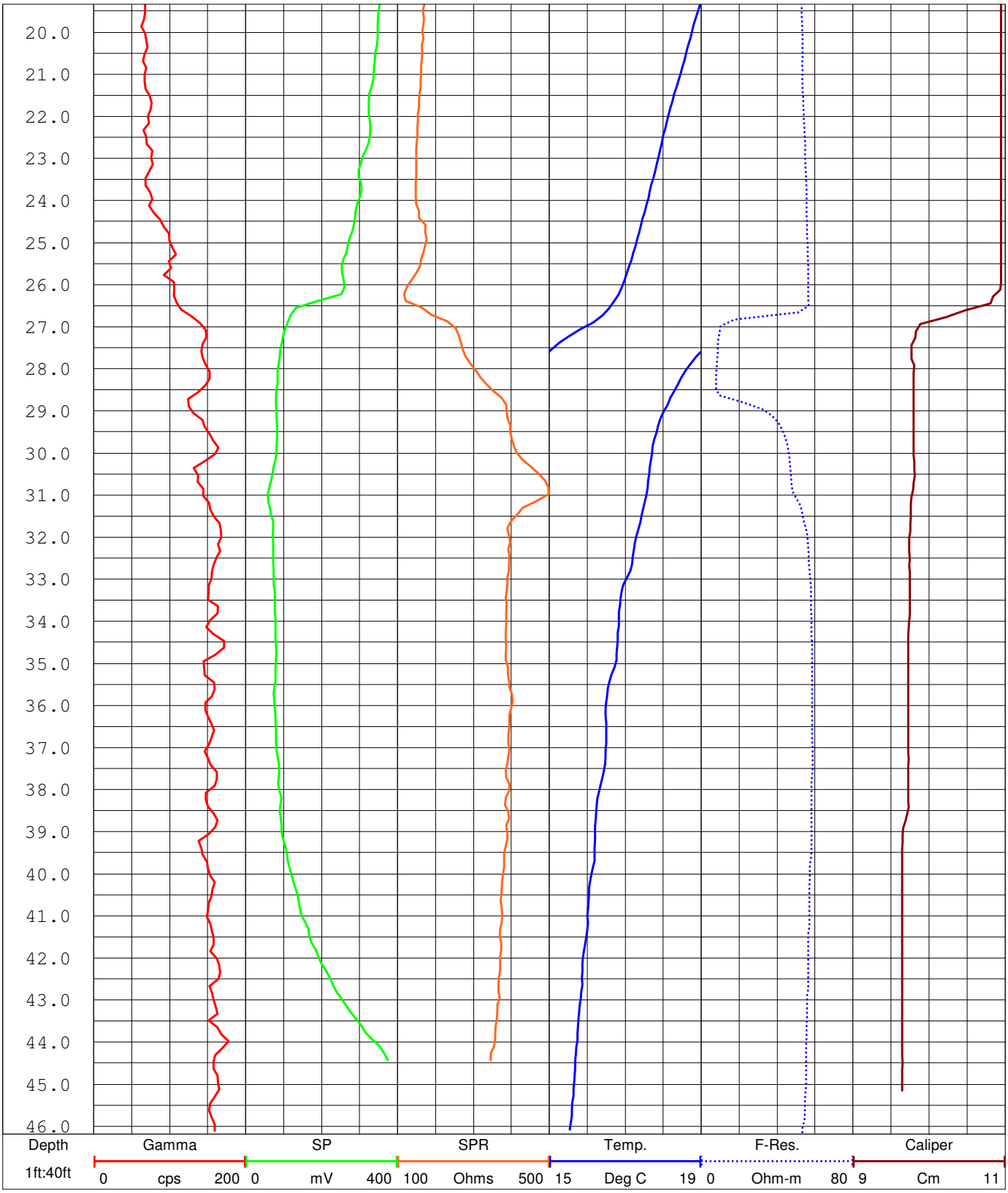
SP
0 mV 600
SPR
0 Ohms 400
Temp.
14 Deg C 18
F-Res.
0 Ohm-m 80
Caliper
9 Cm 11

Brown AND Caldwell

PROJECT:	*Rensselear Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-104R*	**SURFACE CASING:**	*Base of 4' casing: 27' BGS*
LOCATION:	*Rensselear, NY*	**BOREHOLE DIAMETER:**	*4" from 27-47' BGS*
TEST DATE:	*10/28/10*	**PERSONNEL:**	*TMJ*

NORTHING:	*1387652.1*	**G.S. ELEV:**	*17.9*
EASTING:	*695262.7*	**DEPTH LOGGED:**	*0.5-47'*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43.0
44.0
45.0
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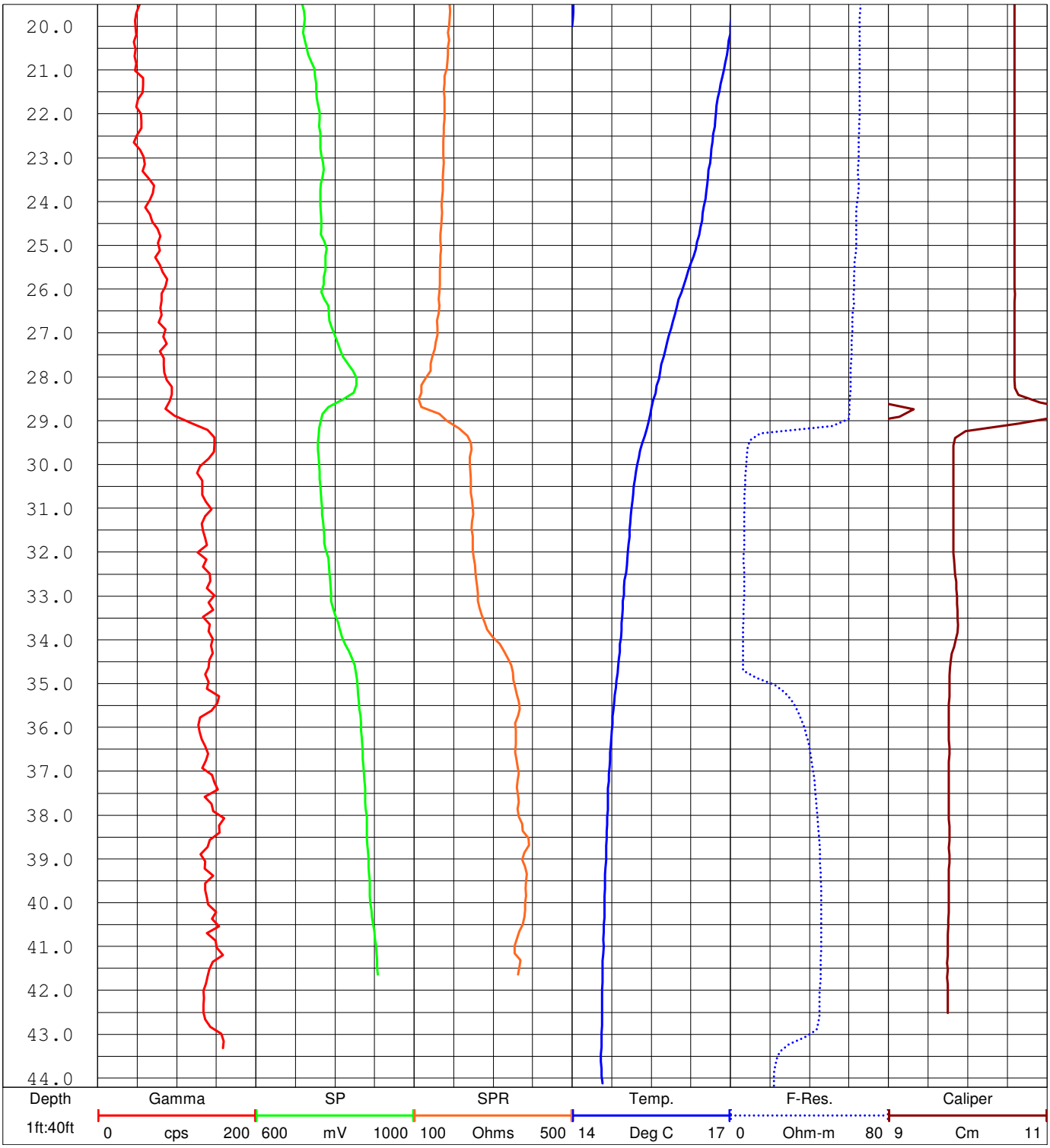
Depth
1ft:40ft
Gamma
0 cps 200
SP
0 mV 400
SPR
100 Ohms 500
Temp.
15 Deg C 19
F-Res.
0 Ohm-m 80
Caliper
9 Cm 11

Brown AND Caldwell

PROJECT:	*Rensselaer Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-106R*	**SURFACE CASING:**	*Base of 4" steel casing: 29' BGS*
LOCATION:	*Rensselaer, NY*	**BOREHOLE DIAMETER:**	*4" from 29-44' BGS*
TEST DATE:	*11/1/10*	**PERSONNEL:**	*TMJ*

NORTHING:	*1387669.2*	**G.S. ELEV:**	*18.6*
EASTING:	*695384.3*	**DEPTH LOGGED:**	*0.5-44' BGS*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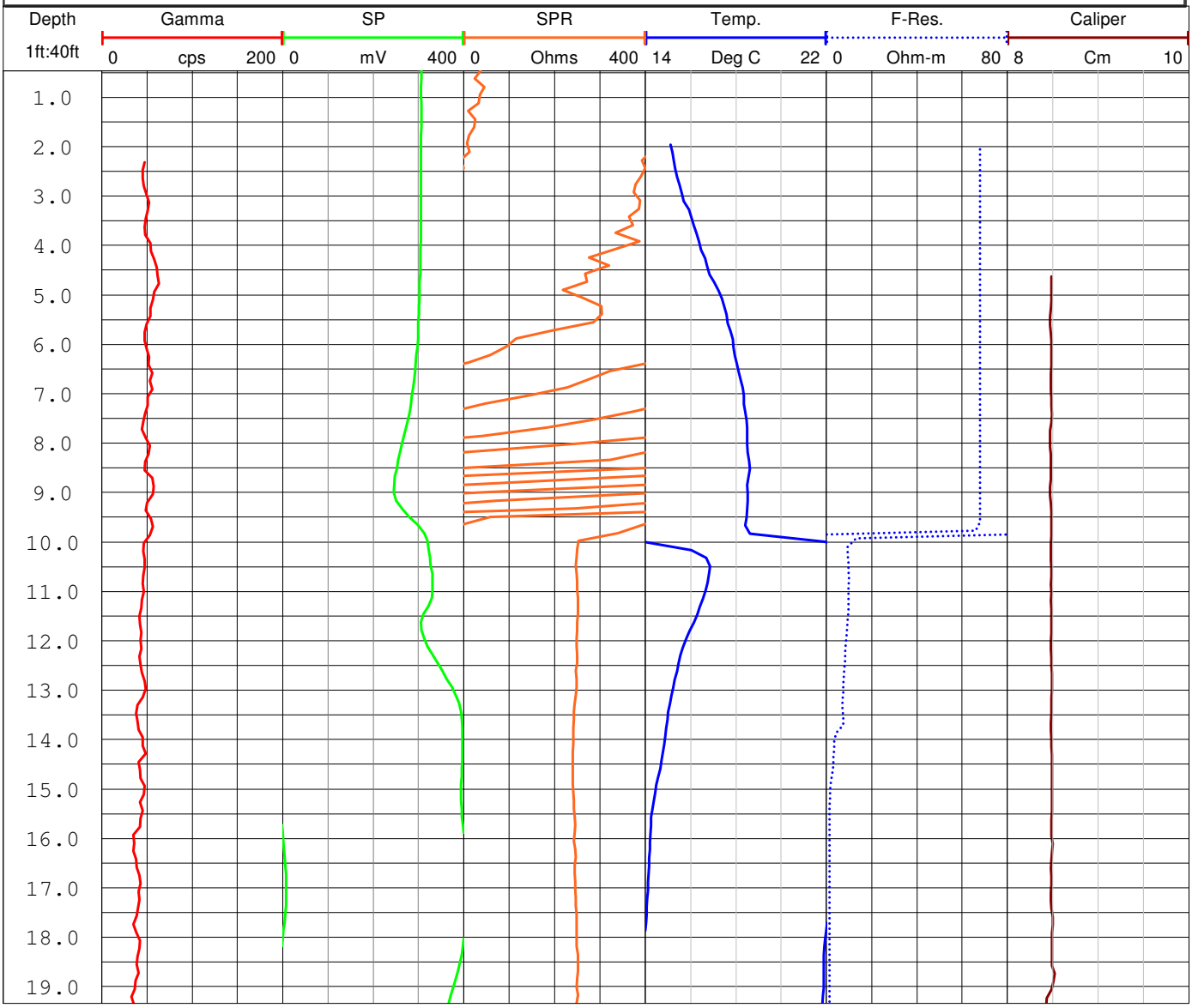
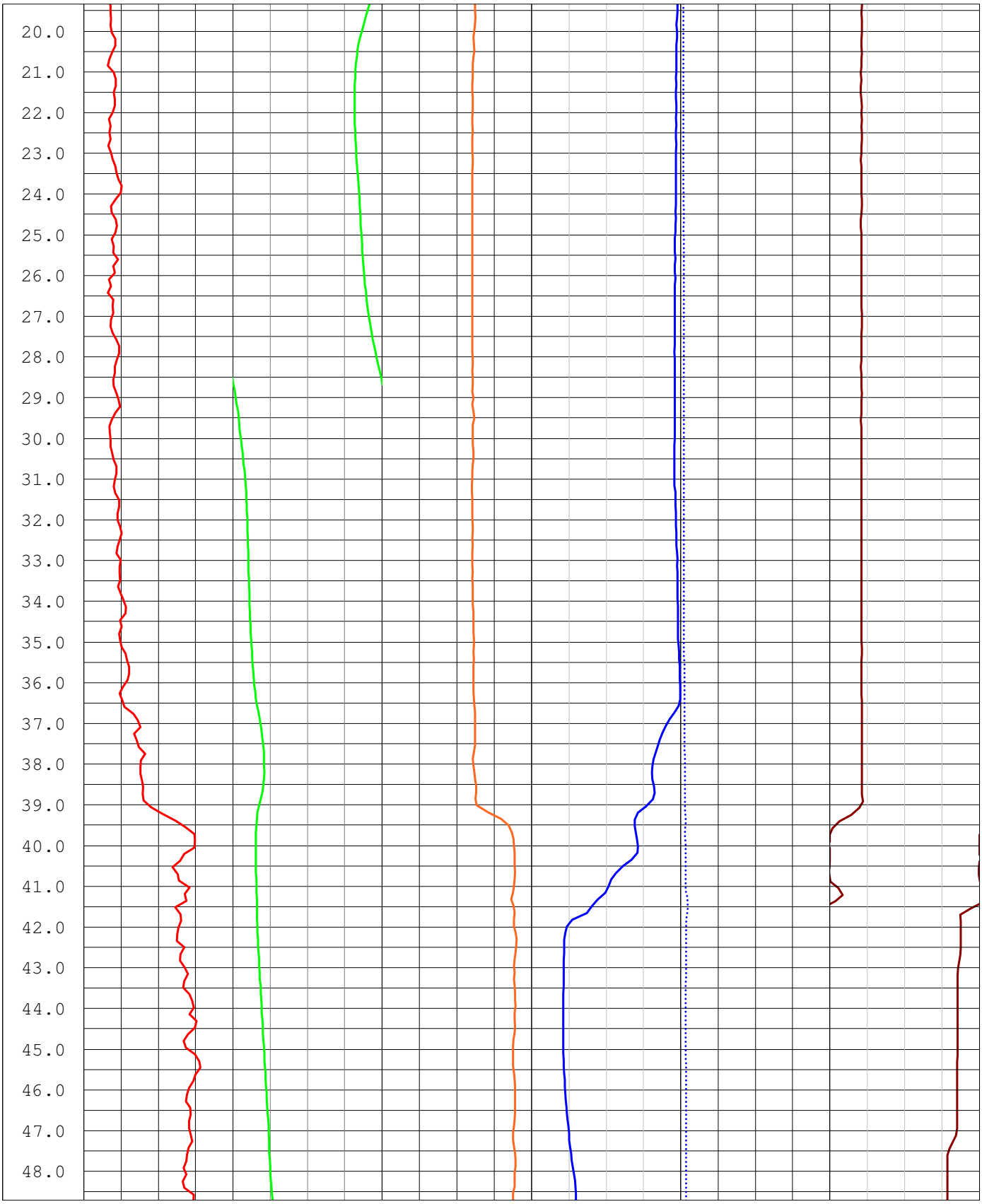
Depth
1ft:40ft
Gamma
0 cps 200
SP
600 mV 1000
SPR
100 Ohms 500
Temp.
14 Deg C 17
F-Res.
0 Ohm-m 80
Caliper
9 Cm 11

Brown AND Caldwell

PROJECT:	*Rensselaer Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-108R*	**SURFACE CASING:**	*Base of 4" steel casing: 39.5' BGS*
LOCATION:	*Rensselaer, NY*	**BOREHOLE DIAMETER:**	*4" from 39.5-64.6' BGS*
TEST DATE:		**PERSONNEL:**	*TMJ*

NORTHING:	*1387898.1*	**G.S. ELEV:**	*15.5*
EASTING:	*695385.8*	**DEPTH LOGGED:**	*0.5-64.6'*

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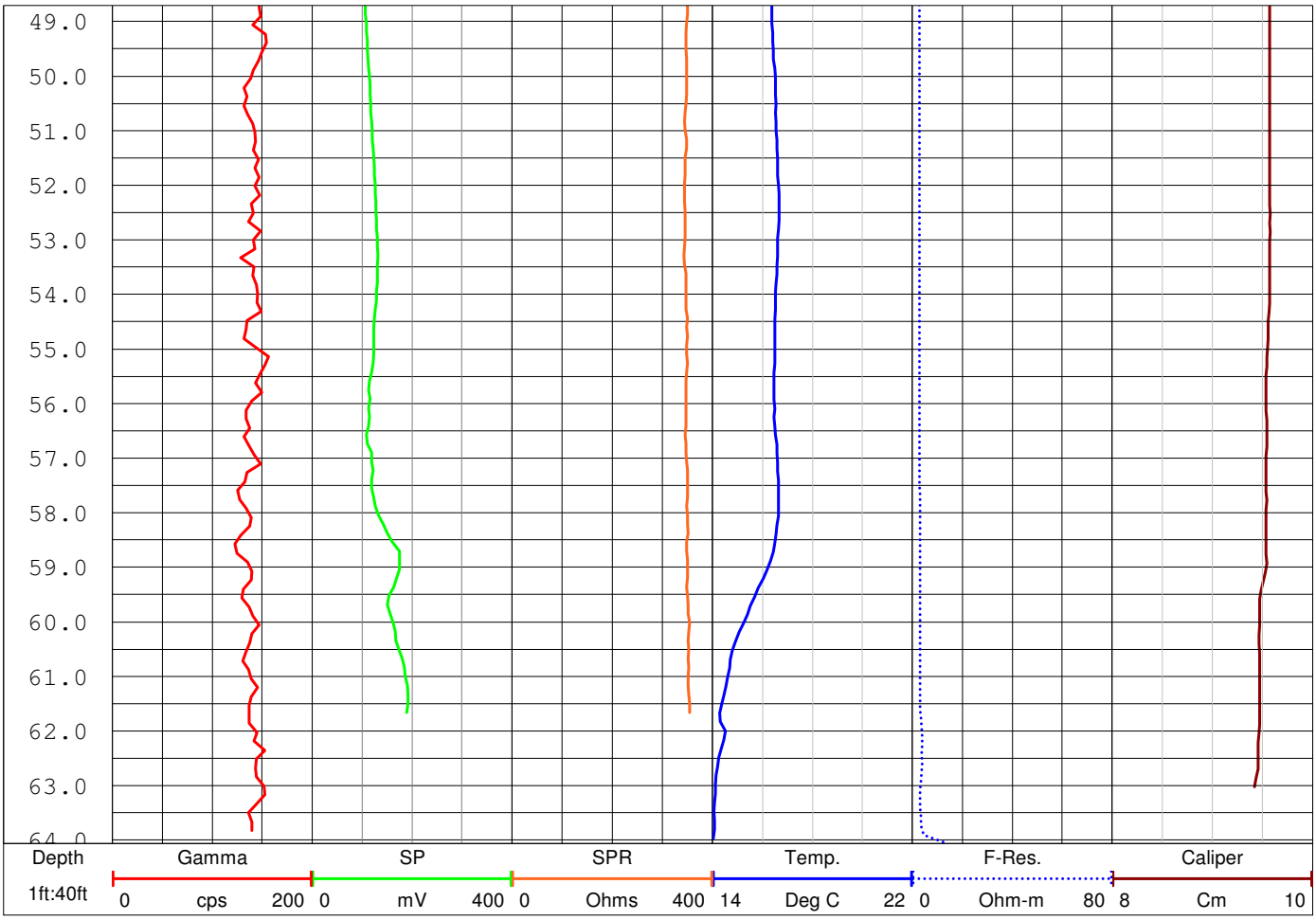
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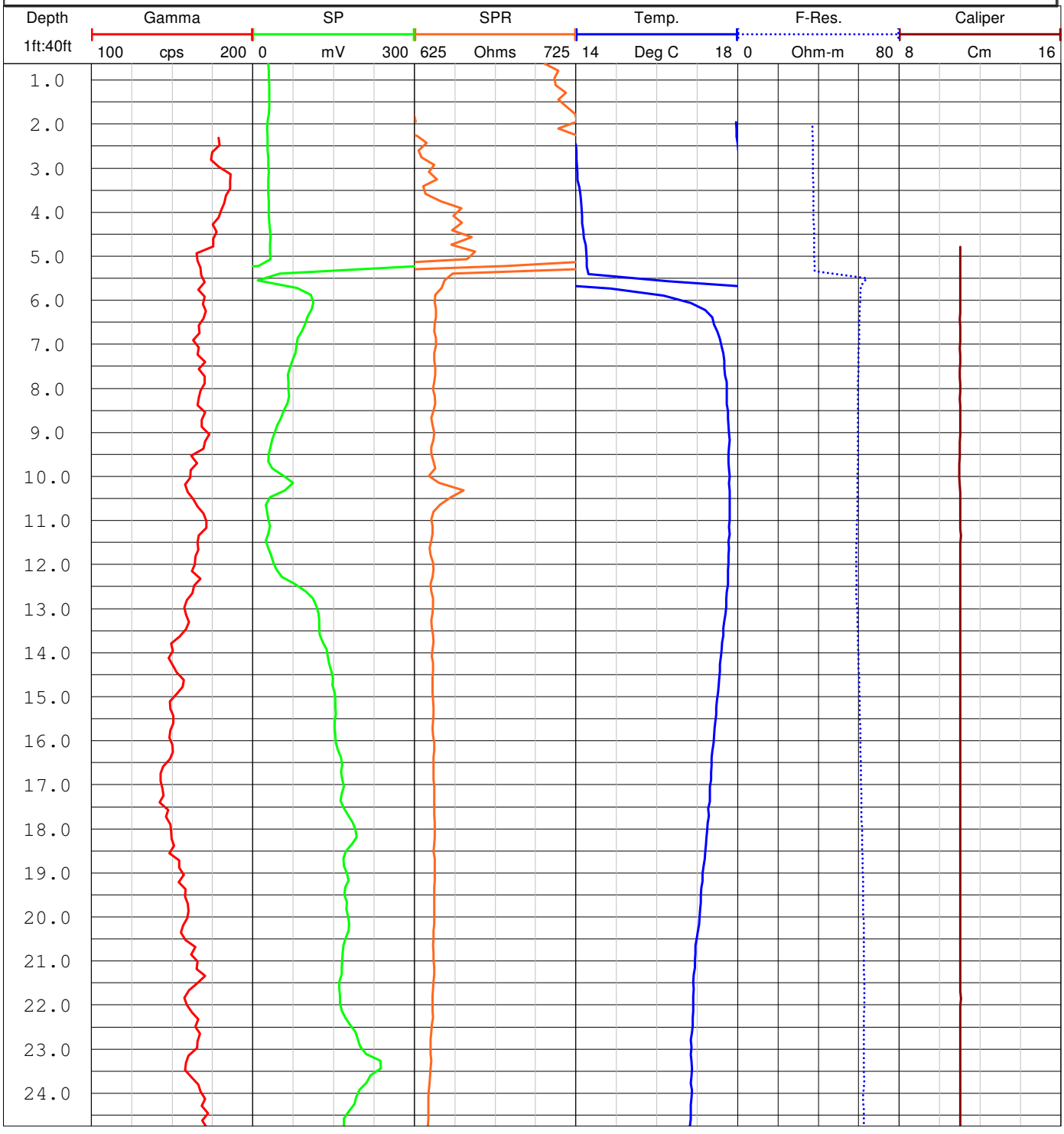
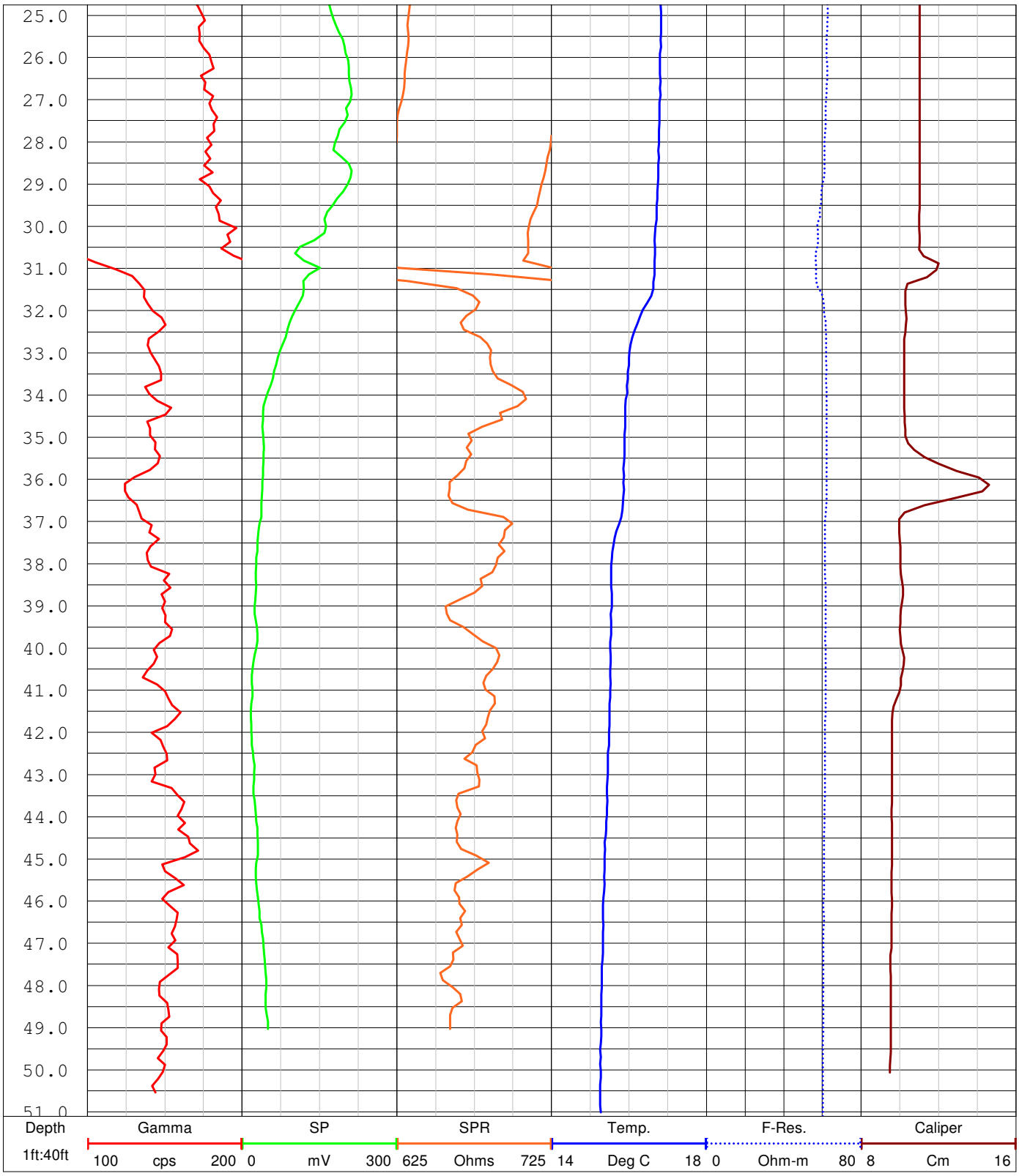
Depth
1ft:40ft
Gamma
0 cps 200
SP
0 mV 400
SPR
0 Ohms 400
Temp.
14 Deg C 22
F-Res.
0 Ohm-m 80
Caliper
8 Cm 10

Brown AND Caldwell

PROJECT:	*Rensselear Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-110R*	**SURFACE CASING:**	*Base of 4" steel casing: 31.5' BGS*
LOCATION:	*Rensselear, NY*	**BOREHOLE DIAMETER:**	*4" from 31.5-51.5' BGS*
TEST DATE:	*10/19/2010*	**PERSONNEL:**	*THC*

NORTHING:	*1387666.0*	**G.S. ELEV:**	*16.4*
EASTING:	*695503.3*	**DEPTH LOGGED:**	*0.5-51.5'*

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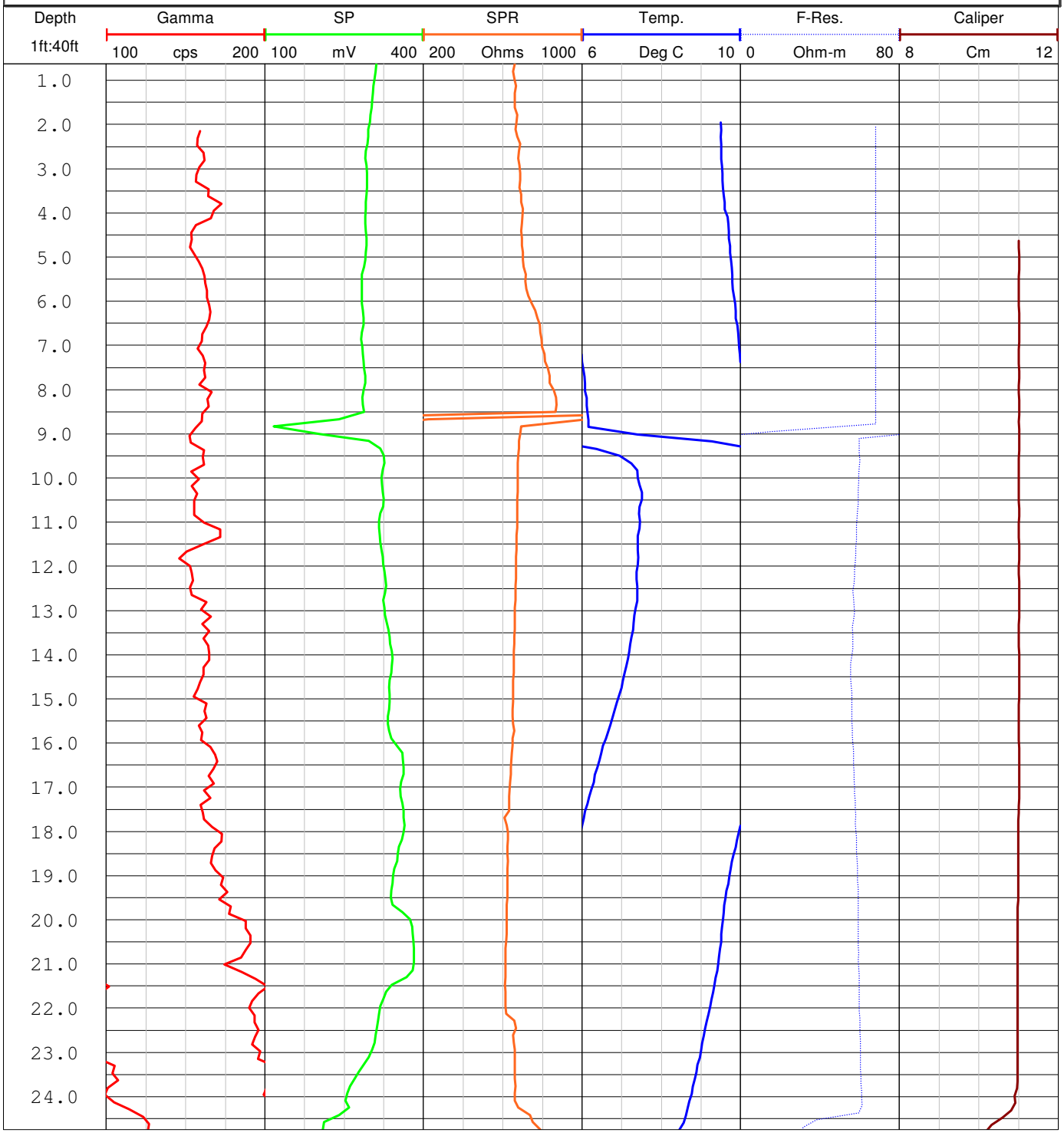
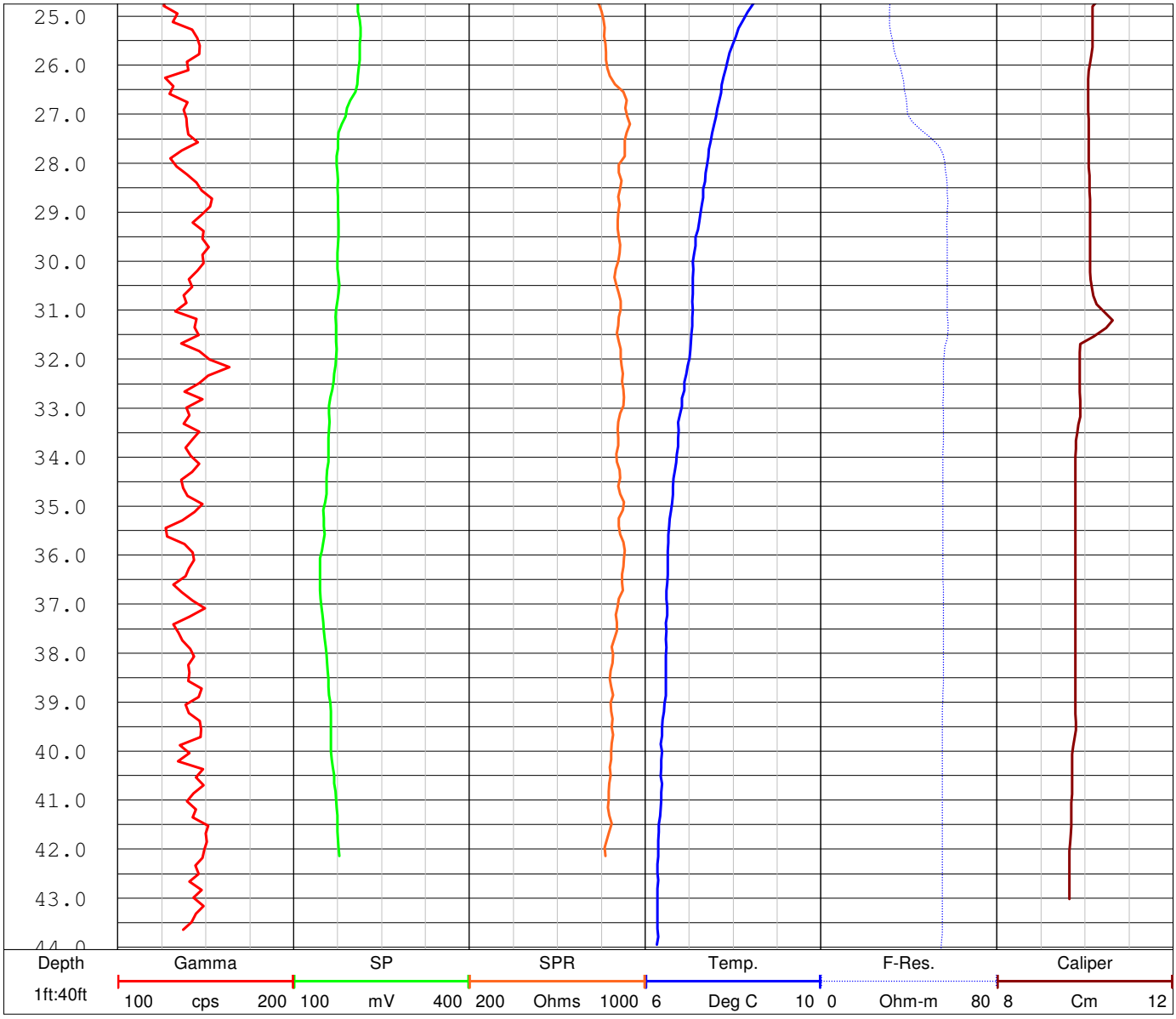
Depth
1ft:40ft
Gamma
100 cps 200
SP
0 mV 300
SPR
625 Ohms 725
Temp.
14 Deg C 18
F-Res.
0 Ohm-m 80
Caliper
8 Cm 16

Brown AND Caldwell

PROJECT:	*Rensselear Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-112R*	**SURFACE CASING:**	*Base of 4" steel casing: 24.5' BGS*
LOCATION:	*Rensselear, NY*	**BOREHOLE DIAMETER:**	*4" from 24.5-41.5' BGS*
TEST DATE:	*10/20/10*	**PERSONNEL:**	*THC*

NORTHING:	*1387752.0*	**G.S. ELEV:**	*17.0*
EASTING:	*695266.9*	**DEPTH LOGGED:**	*0.5-41.5'*

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Depth
1ft:40ft
Gamma
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100 mV 400
SPR
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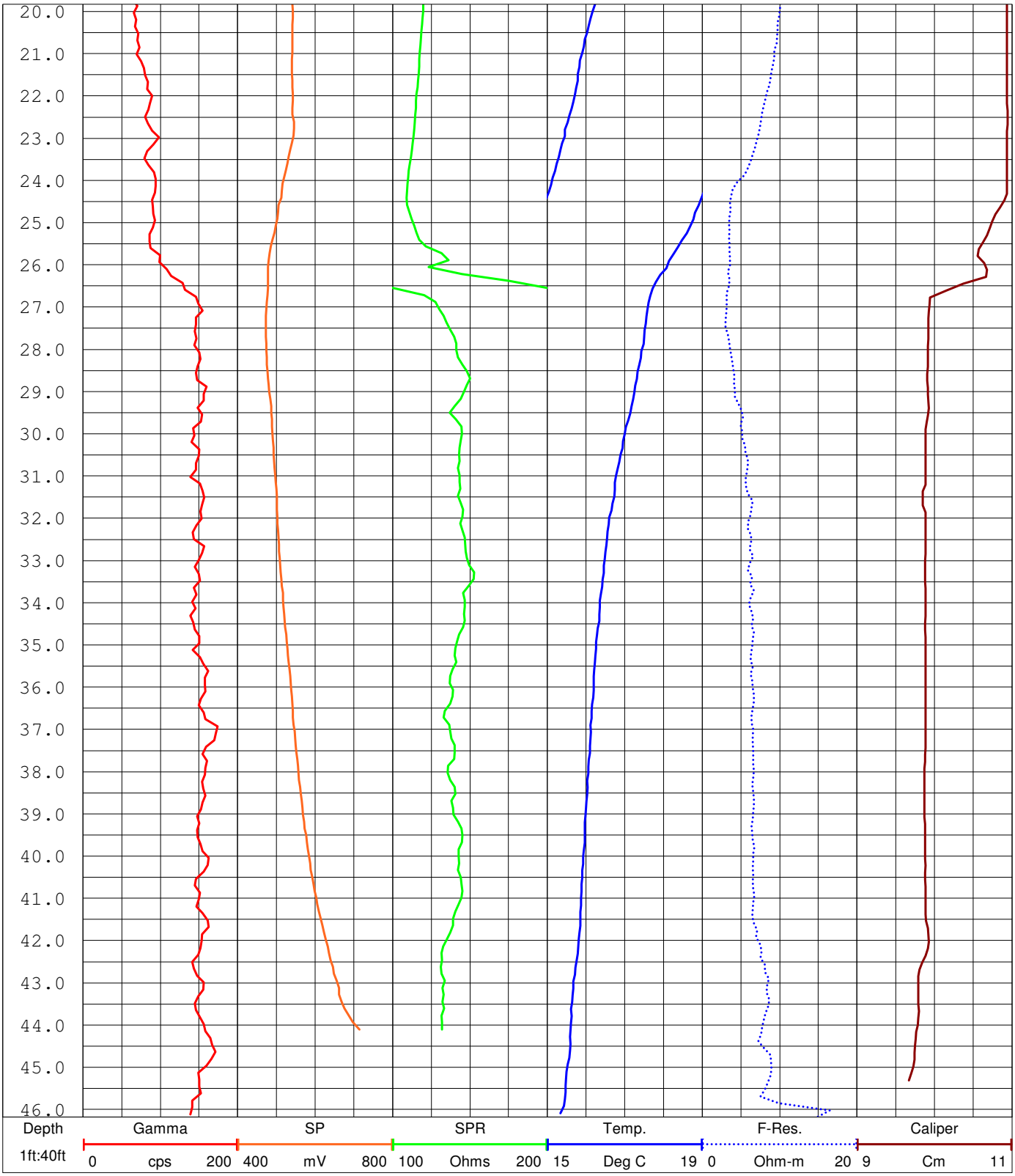
Temp.
6 Deg C 10
F-Res.
0 Ohm-m 80
Caliper
8 Cm 12

Brown AND Caldwell

PROJECT:	*Rensselaer Supp. RI*	**TEST TYPE:**	*Borehole Geophysics*
WELL ID:	*MW-113R*	**SURFACE CASING:**	*Base of 4" steel casing: 26.5' BGS*
LOCATION:	*Rensselaer, NY*	**BOREHOLE DIAMETER:**	*4" from 26.5-47' BGS*
TEST DATE:	*10/26/10*	**PERSONNEL:**	*TMJ*

NORTHING:	*1387541.9*	**G.S. ELEV:**	*17.1*
EASTING:	*695285.9*	**DEPTH LOGGED:**	*0.5-47'*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400
mV
800
SPR
100
Ohms
200
Temp.
15
Deg C
19
F-Res.
0
Ohm-m
20
Caliper
9
Cm
11

Appendix C: Packer Pressure Test Data

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm^3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-102R	***4***	5.1	***26 - 31***	5	152	***< 0.05***	3	***8.6***	***6.0***	25.87	788	< 1.4E-05
	4	5.1	***26 - 31***	5	152	***< 0.05***	3	***14.9***	***6.0***	40.42	1,232	< 9.1E-06
	4	5.1	***26 - 31***	5	152	***< 0.05***	3	***8.6***	***6.0***	25.87	788	< 1.4E-05
	4	5.1	***31 - 36***	5	152	***< 0.05***	3	***10.1***	***6.0***	29.33	894	< 1.3E-05
	4	5.1	***31 - 36***	5	152	***< 0.05***	3	***17.6***	***6.0***	46.66	1,422	< 7.9E-06
	4	5.1	***31 - 36***	5	152	***< 0.05***	3	***10.1***	***6.0***	29.33	894	< 1.3E-05
	4	5.1	***36 - 41***	5	152	***< 0.05***	3	***11.5***	***6.0***	32.57	993	< 1.1E-05
	4	5.1	***36 - 41***	5	152	***< 0.05***	3	***20.2***	***6.0***	52.66	1,605	< 7.0E-06
	4	5.1	***36 - 41***	5	152	***< 0.05***	3	***11.5***	***6.0***	32.57	993	< 1.1E-05
	4	5.1	***41 - 46***	5	152	***< 0.05***	3	***13.1***	***6.0***	36.26	1,105	< 1.0E-05
	4	5.1	***41 - 46***	5	152	***< 0.05***	3	***22.8***	***6.0***	58.67	1,788	< 6.3E-06
	4	5.1	***41 - 46***	5	152	***< 0.05***	3	***13.1***	***6.0***	36.26	1,105	< 1.0E-05

Notes:

1. Field data ***(in bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-104R	***4***	5.1	***27 - 32***	5	152	***< 0.05***	3	***8.9***	***8.0***	28.56	870	< 1.3E-05
	4	5.1	***27 - 32***	5	152	***< 0.05***	3	***15.5***	***8.0***	43.81	1,335	< 8.4E-06
	4	5.1	***27 - 32***	5	152	***< 0.05***	3	***8.9***	***8.0***	28.56	870	< 1.3E-05
	4	5.1	***32 - 37***	5	152	***< 0.05***	3	***10.4***	***8.0***	32.02	976	< 1.1E-05
	4	5.1	***32 - 37***	5	152	***< 0.05***	3	***18.1***	***8.0***	49.81	1,518	< 7.4E-06
	4	5.1	***32 - 37***	5	152	***< 0.05***	3	***10.4***	***8.0***	32.02	976	< 1.1E-05
	4	5.1	***37 - 42***	5	152	***< 0.05***	3	***11.9***	***8.0***	35.49	1,082	< 1.0E-05
	4	5.1	***37 - 42***	5	152	***< 0.05***	3	***20.7***	***8.0***	55.82	1,701	< 6.6E-06
	4	5.1	***37 - 42***	5	152	***< 0.05***	3	***11.9***	***8.0***	35.49	1,082	< 1.0E-05
	4	5.1	***42 - 47***	5	152	***< 0.05***	3	***13.5***	***8.0***	39.19	1,194	< 9.4E-06
	4	5.1	***42 - 47***	5	152	***< 0.05***	3	***23.4***	***8.0***	62.05	1,891	< 5.9E-06
	4	5.1	***42 - 47***	5	152	***< 0.05***	3	***13.5***	***8.0***	39.19	1,194	< 9.4E-06

Notes:

1. Field data ***(In bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-106R	***4***	5.1	***29 - 34***	5	152	***< 0.05***	3	***9.5***	***6.0***	27.95	852	< 1.3E-05
	4	5.1	***29 - 34***	5	152	***< 0.05***	3	***16.5***	***6.0***	44.12	1,345	< 8.3E-06
	4	5.1	***29 - 34***	5	152	***< 0.05***	3	***9.5***	***6.0***	27.95	852	< 1.3E-05
	4	5.1	***34 - 39***	5	152	***< 0.05***	3	***10.9***	***6.0***	31.18	950	< 1.2E-05
	4	5.1	***34 - 39***	5	152	***< 0.05***	3	***19.1***	***6.0***	50.12	1,528	< 7.3E-06
	4	5.1	***34 - 39***	5	152	***< 0.05***	3	***10.9***	***6.0***	31.18	950	< 1.2E-05
	4	5.1	***39 - 44***	5	152	***< 0.05***	3	***12.5***	***6.0***	34.88	1,063	< 1.1E-05
	4	5.1	***39 - 44***	5	152	***< 0.05***	3	***21.8***	***6.0***	56.36	1,718	< 6.5E-06
	4	5.1	***39 - 44***	5	152	***< 0.05***	3	***12.5***	***6.0***	34.88	1,063	< 1.1E-05

Notes:

1. Field data ***(in bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-108R	***4***	5.1	***39.5 - 44.5***	5	152	***0.01***	1	***12.6***	***9.0***	38.11	1,161	1.9E-06
	4	5.1	***39.5 - 44.5***	5	152	***0.02***	1	***22***	***9.0***	59.82	1,823	2.5E-06
	4	5.1	***39.5 - 44.5***	5	152	***< 0.05***	3	***12.6***	***9.0***	38.11	1,161	< 9.7E-06
	4	5.1	***44.6 - 49.6***	5	152	***< 0.05***	3	***14***	***9.0***	41.34	1,260	< 8.9E-06
	4	5.1	***44.6 - 49.6***	5	152	***< 0.05***	3	***25***	***9.0***	66.75	2,035	< 5.5E-06
	4	5.1	***44.6 - 49.6***	5	152	***< 0.05***	3	***14***	***9.0***	41.34	1,260	< 8.9E-06
	4	5.1	***49.6 - 54.6***	5	152	***< 0.05***	3	***15.6***	***9.0***	45.04	1,373	< 8.2E-06
	4	5.1	***49.6 - 54.6***	5	152	***< 0.05***	3	***27.3***	***9.0***	72.06	2,196	< 5.1E-06
	4	5.1	***49.6 - 54.6***	5	152	***< 0.05***	3	***15.6***	***9.0***	45.04	1,373	< 8.2E-06
	4	5.1	***54.6 - 59.6***	5	152	***< 0.05***	3	***17***	***9.0***	48.27	1,471	< 7.6E-06
	4	5.1	***54.6 - 59.6***	5	152	***< 0.05***	3	***30***	***9.0***	78.30	2,387	< 4.7E-06
	4	5.1	***54.6 - 59.6***	5	152	***< 0.05***	3	***17***	***9.0***	48.27	1,471	< 7.6E-06
	4	5.1	***59.6 - 64.6***	5	152	***< 0.05***	3	***18.6***	***9.0***	51.97	1,584	< 7.1E-06
	4	5.1	***59.6 - 64.6***	5	152	***< 0.05***	3	***32.6***	***9.0***	84.31	2,570	< 4.4E-06
	4	5.1	***59.6 - 64.6***	5	152	***< 0.05***	3	***18.6***	***9.0***	51.97	1,584	< 7.1E-06

Notes:

1. Field data ***(in bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-110R	***4***	5.1	***31.5 - 36.5***	5	152	***< 0.05***	3	***10.2***	***7.0***	30.56	932	< 1.2E-05
	4	5.1	***31.5 - 36.5***	5	152	***< 0.05***	3	***17.9***	***7.0***	48.35	1,474	< 7.6E-06
	4	5.1	***31.5 - 36.5***	5	152	***< 0.05***	3	***10.2***	***7.0***	30.56	932	< 1.2E-05
	4	5.1	***36.5 - 41.5***	5	152	***< 0.05***	3	***11.7***	***7.0***	34.03	1,037	< 1.1E-05
	4	5.1	***36.5 - 41.5***	5	152	***< 0.05***	3	***20.5***	***7.0***	54.36	1,657	< 6.8E-06
	4	5.1	***36.5 - 41.5***	5	152	***< 0.05***	3	***11.7***	***7.0***	34.03	1,037	< 1.1E-05
	4	5.1	***41.5 - 46.5***	5	152	***< 0.05***	3	***13.2***	***7.0***	37.49	1,143	< 9.8E-06
	4	5.1	***41.5 - 46.5***	5	152	***< 0.05***	3	***23.1***	***7.0***	60.36	1,840	< 6.1E-06
	4	5.1	***41.5 - 46.5***	5	152	***< 0.05***	3	***13.2***	***7.0***	37.49	1,143	< 9.8E-06
	4	5.1	***46.5 - 51.5***	5	152	***< 0.05***	3	***14.7***	***7.0***	40.96	1,248	< 9.0E-06
	4	5.1	***46.5 - 51.5***	5	152	***< 0.05***	3	***25.7***	***7.0***	66.37	2,023	< 5.5E-06
	4	5.1	***46.5 - 51.5***	5	152	***< 0.05***	3	***14.7***	***7.0***	40.96	1,248	< 9.0E-06

Notes:

1. Field data ***(in bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-112R	***4***	5.1	***24.5 - 29.5***	5	152	***< 0.05***	3	***8.1***	***8.5***	27.21	829	< 1.4E-05
	4	5.1	***24.5 - 29.5***	5	152	***< 0.05***	3	***14***	***8.5***	40.84	1,245	< 9.0E-06
	4	5.1	***24.5 - 29.5***	5	152	***< 0.05***	3	***8.1***	***8.5***	27.21	829	< 1.4E-05
	4	5.1	***29.5 - 34.5***	5	152	***< 0.05***	3	***9.6***	***8.5***	30.68	935	< 1.2E-05
	4	5.1	***29.5 - 34.5***	5	152	***< 0.05***	3	***16.8***	***8.5***	47.31	1,442	< 7.8E-06
	4	5.1	***29.5 - 34.5***	5	152	***< 0.05***	3	***9.6***	***8.5***	30.68	935	< 1.2E-05
	4	5.1	***34.5 - 39.5***	5	152	***< 0.05***	3	***11.1***	***8.5***	34.14	1,041	< 1.1E-05
	4	5.1	***34.5 - 39.5***	5	152	***< 0.05***	3	***19.4***	***8.5***	53.31	1,625	< 6.9E-06
	4	5.1	***34.5 - 39.5***	5	152	***< 0.05***	3	***11.1***	***8.5***	34.14	1,041	< 1.1E-05
	4	5.1	***39.5 - 44.5***	5	152	***< 0.05***	3	***12.6***	***8.5***	37.61	1,146	< 9.8E-06
	4	5.1	***39.5 - 44.5***	5	152	***< 0.05***	3	***22***	***8.5***	59.32	1,808	< 6.2E-06
	4	5.1	***39.5 - 44.5***	5	152	***< 0.05***	3	***12.6***	***8.5***	37.61	1,146	< 9.8E-06

Notes:

1. Field data ***(in bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

BOREHOLE PACKER HYDRAULIC CONDUCTIVITY DATA

Location	Borehole Diameter (inches)	Borehole Radius (R) (cm)	Test Interval (ft)	Length (L) (ft)	Length (L) (cm)	Injection Rate (q) (gal/min)	Injection Rate (q) (cm3/sec)	Gauge Pressure (psi)	Approx. Depth to GW (ft)	Calculated Total Head (H) (ft)	Calculated Total Head (H) (cm)	Hydraulic Conductivity (k) (cm/sec)
MW-113R	***4***	5.1	***26.5 - 31.5***	5	152	***< 0.05***	3	***8.7***	***7.0***	27.10	826	< 1.4E-05
	4	5.1	***26.5 - 31.5***	5	152	***< 0.05***	3	***15.2***	***7.0***	42.11	1,284	< 8.7E-06
	4	5.1	***26.5 - 31.5***	5	152	***< 0.05***	3	***8.7***	***7.0***	27.10	826	< 1.4E-05
	4	5.1	***31.5 - 36.5***	5	152	***< 0.05***	3	***10.2***	***7.0***	30.56	932	< 1.2E-05
	4	5.1	***31.5 - 36.5***	5	152	***< 0.05***	3	***17.9***	***7.0***	48.35	1,474	< 7.6E-06
	4	5.1	***31.5 - 36.5***	5	152	***< 0.05***	3	***10.2***	***7.0***	30.56	932	< 1.2E-05
	4	5.1	***36.5 - 41.5***	5	152	***< 0.05***	3	***11.7***	***7.0***	34.03	1,037	< 1.1E-05
	4	5.1	***36.5 - 41.5***	5	152	***< 0.05***	3	***20.5***	***7.0***	54.36	1,657	< 6.8E-06
	4	5.1	***36.5 - 41.5***	5	152	***< 0.05***	3	***11.7***	***7.0***	34.03	1,037	< 1.1E-05
	4	5.1	***41.5 - 46.5***	5	152	***< 0.05***	3	***13.2***	***7.0***	37.49	1,143	< 9.8E-06
	4	5.1	***41.5 - 46.5***	5	152	***< 0.05***	3	***23.1***	***7.0***	60.36	1,840	< 6.1E-06
	4	5.1	***41.5 - 46.5***	5	152	***< 0.05***	3	***13.2***	***7.0***	37.49	1,143	< 9.8E-06

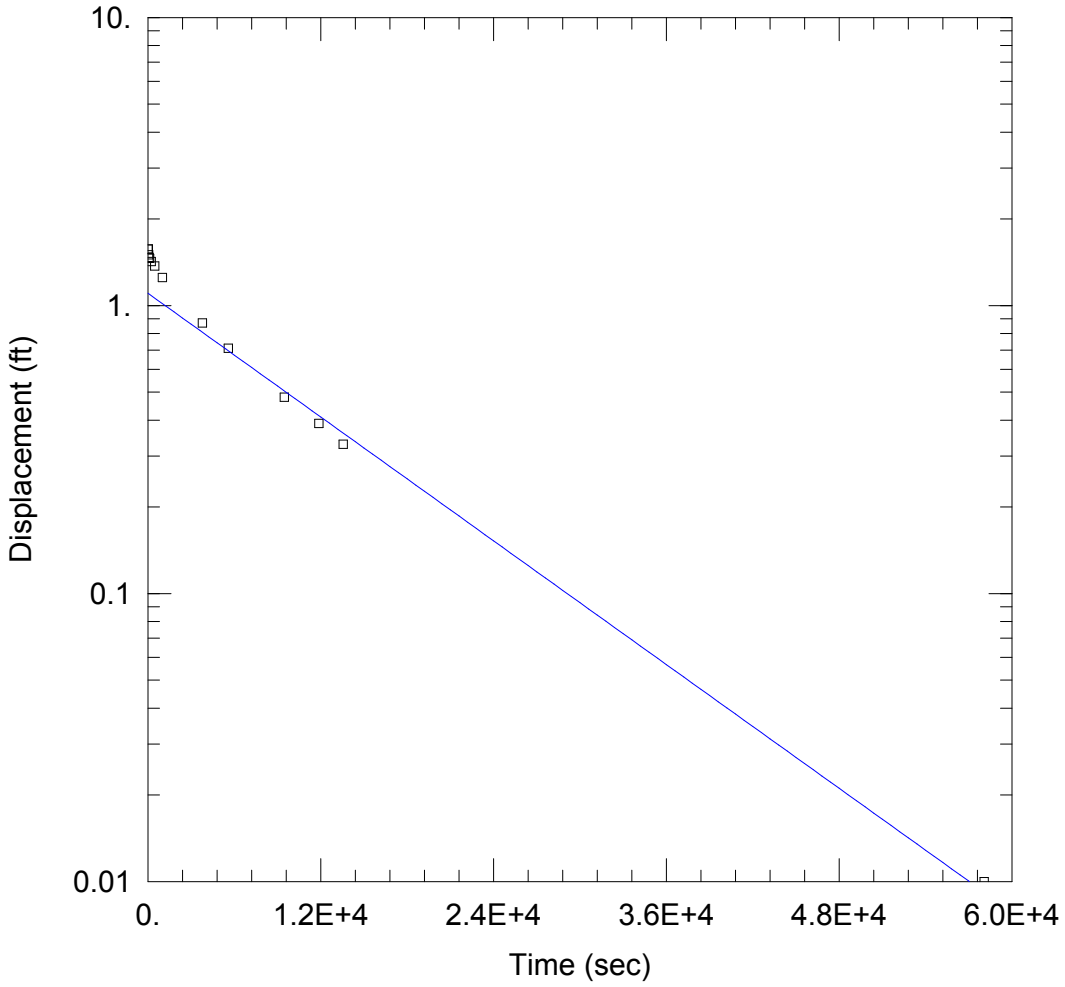
Notes:

1. Field data ***(in bold italics)*** obtained from borehole tests.
2. Calculations made in accordance with US Bureau of Reclamation, (1990), Earth Manual, Method No. USBR 7310-89.
3. Flows (q) as low as approximately 3 cm^3/sec (0.05 gpm) could be measured with the field equipment. In intervals with no measurable water take, this value was used to calculate a "less than" (<) k value.
4. For intervals with measurable flow (q), injection rate was averaged over five minute period.

$$k = \frac{q}{2\pi LH} \ln \frac{L}{r}$$

where:
k = hydraulic conductivity (cm/sec)
q = constant flow water injection rate (cm^3/sec); 3 cm^3/sec used as injection rate for intervals that did not take any water
L = test interval length (cm)
H = differential head during test (cm). H = Gravity head (H_g) + Pressure head (H_p). H_g = vertical distance from pressure gage to static groundwater level, H_p = water injection pressure from gauge.
r = radius of borehole (cm)

Appendix D: In-Situ Hydraulic Conductivity Plots



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_102R_10.aqt
Date: 06/15/11 Time: 08:27:57

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-102R-10
Test Date: 4/25/2011

AQUIFER DATA

Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

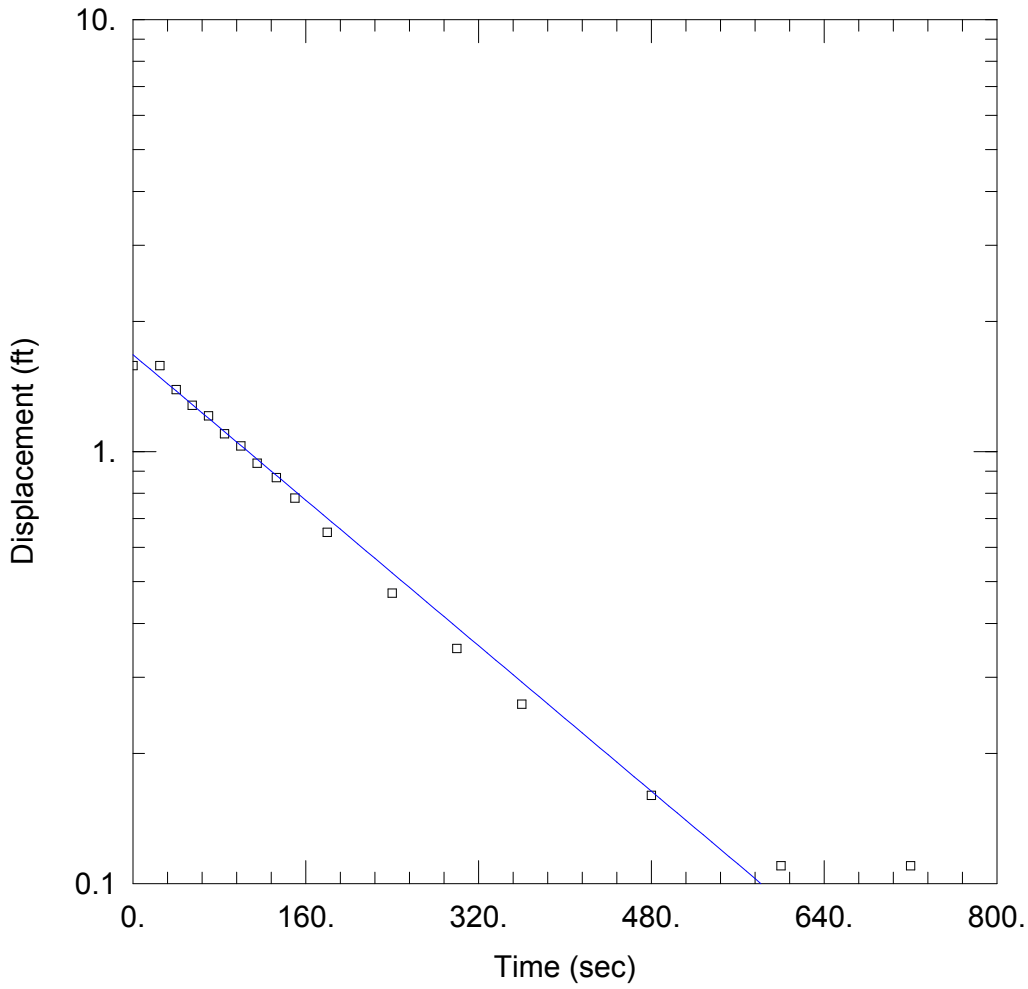
WELL DATA (MW-102R-10)

Initial Displacement: 1.57 ft
Total Well Penetration Depth: 31.42 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 31.42 ft
Screen Length: 10. ft
Well Radius: 0.1666 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 4.62E-6 cm/sec y0 = 1.102 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_104R_10.aqt
Date: 06/15/11 Time: 08:30:14

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-104R-10
Test Date: 4/25/2011

AQUIFER DATA

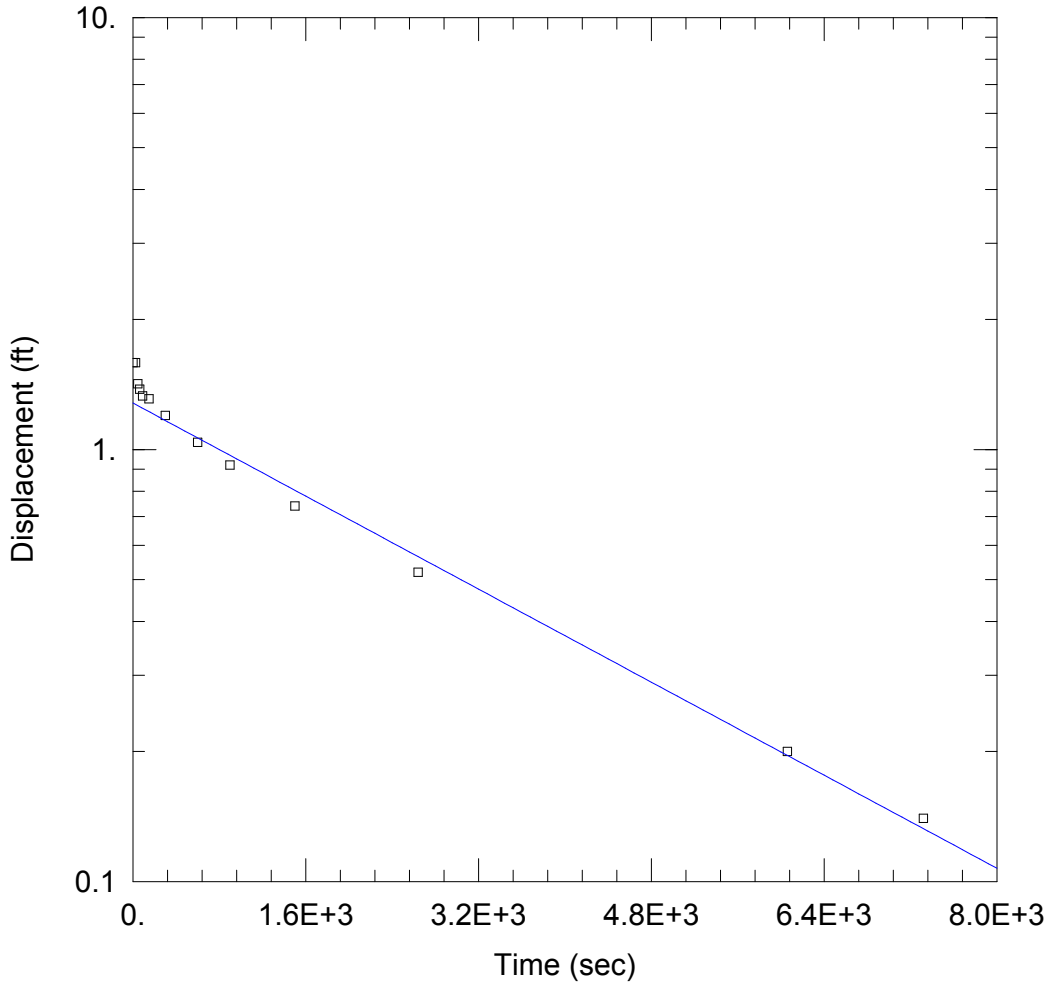
Saturated Thickness: 10. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-104R-10)

Initial Displacement: 1.58 ft
Total Well Penetration Depth: 31.93 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 31.93 ft
Screen Length: 10. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Hvorslev
K = 0.0002716 cm/sec
y0 = 1.676 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_106R_10.aqt
Date: 06/15/11 Time: 08:33:37

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-106R-10
Test Date: 4/25/2011

AQUIFER DATA

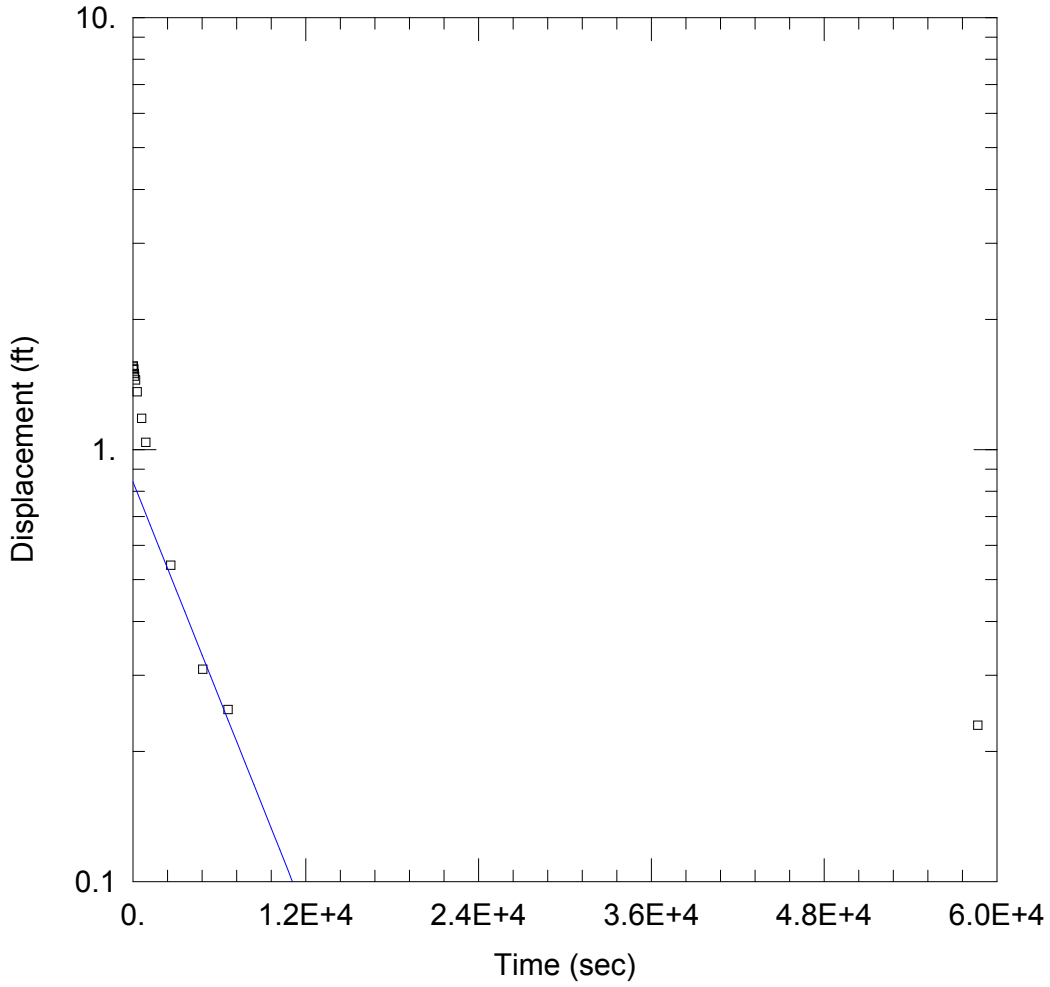
Saturated Thickness: 10. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-106R-10)

Initial Displacement: 1.59 ft
Total Well Penetration Depth: 33.63 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 33.63 ft
Screen Length: 10. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.571E-5 cm/sec
y0 = 1.281 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_108R_10.aqt
Date: 06/15/11 Time: 08:35:17

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-108R-10
Test Date: 4/25/2011

AQUIFER DATA

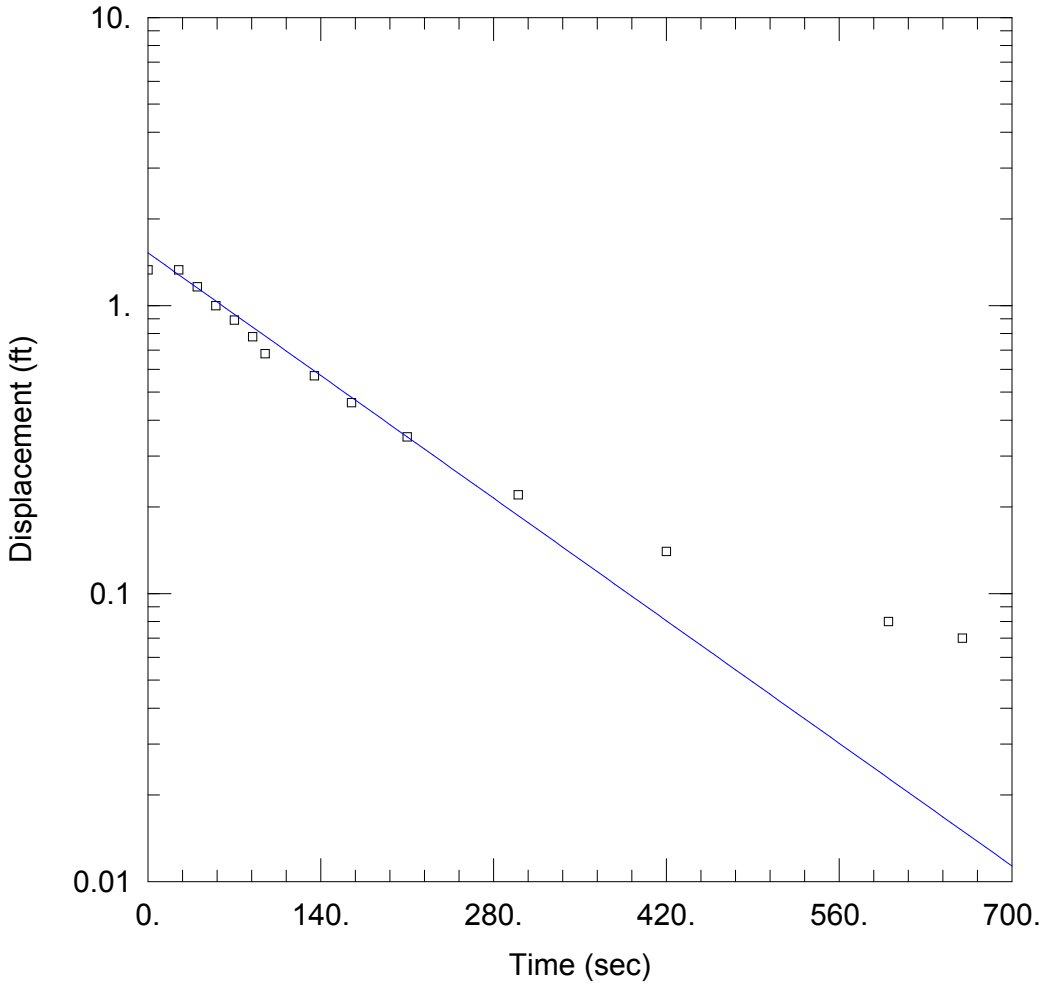
Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-108R-10)

Initial Displacement: 1.56 ft
Total Well Penetration Depth: 44.61 ft
Casing Radius: 0.08333 ft
Static Water Column Height: 44.61 ft
Screen Length: 10. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
K = 1.078E-5 cm/sec y0 = 0.8416 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_110R_10.aqt
Date: 06/15/11 Time: 08:37:01

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-110R-10
Test Date: 4/25/2011

AQUIFER DATA

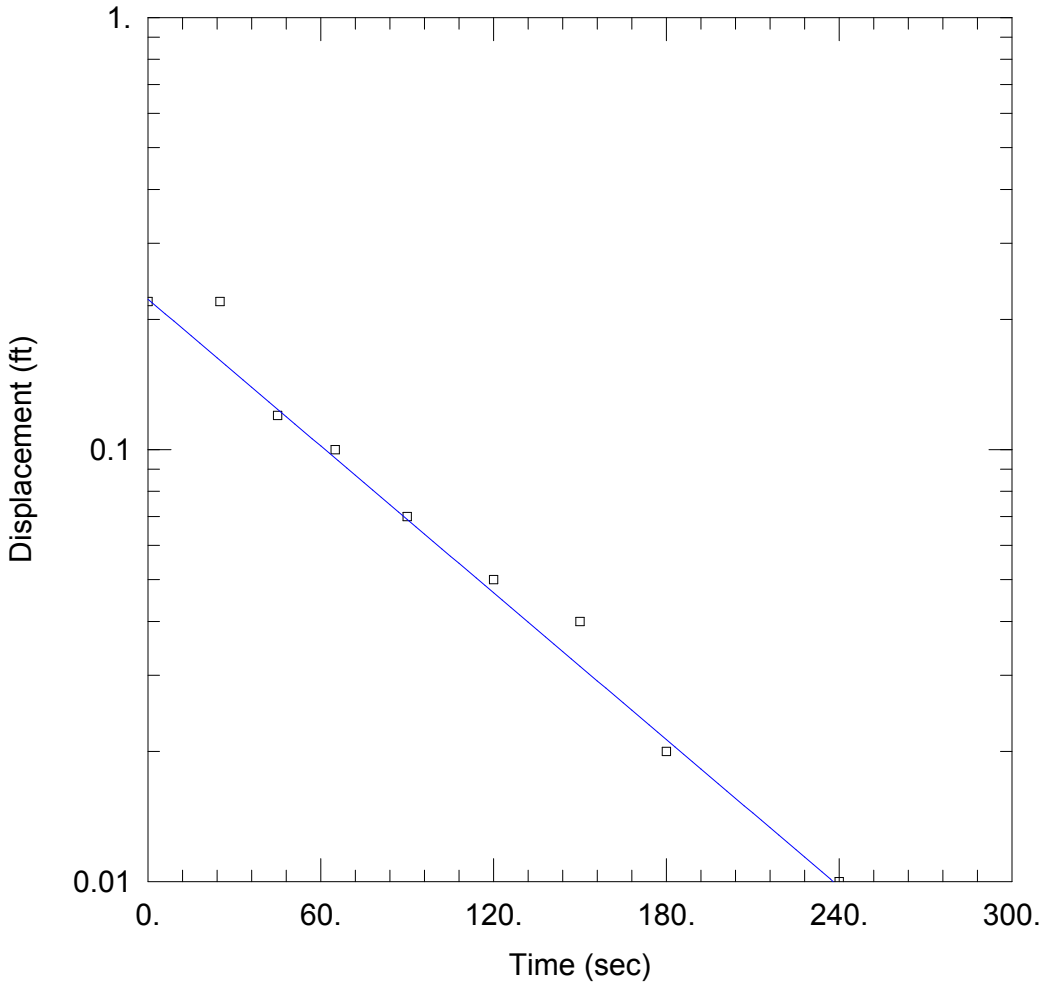
Saturated Thickness: 10. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-110R-10)

Initial Displacement: 1.33 ft
Total Well Penetration Depth: 36.28 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 36.28 ft
Screen Length: 10. ft
Well Radius: 0.1666 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.0003923 cm/sec
y0 = 1.523 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_112_10.aqt
Date: 06/15/11 Time: 08:39:16

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-112-10
Test Date: 4/25/2011

AQUIFER DATA

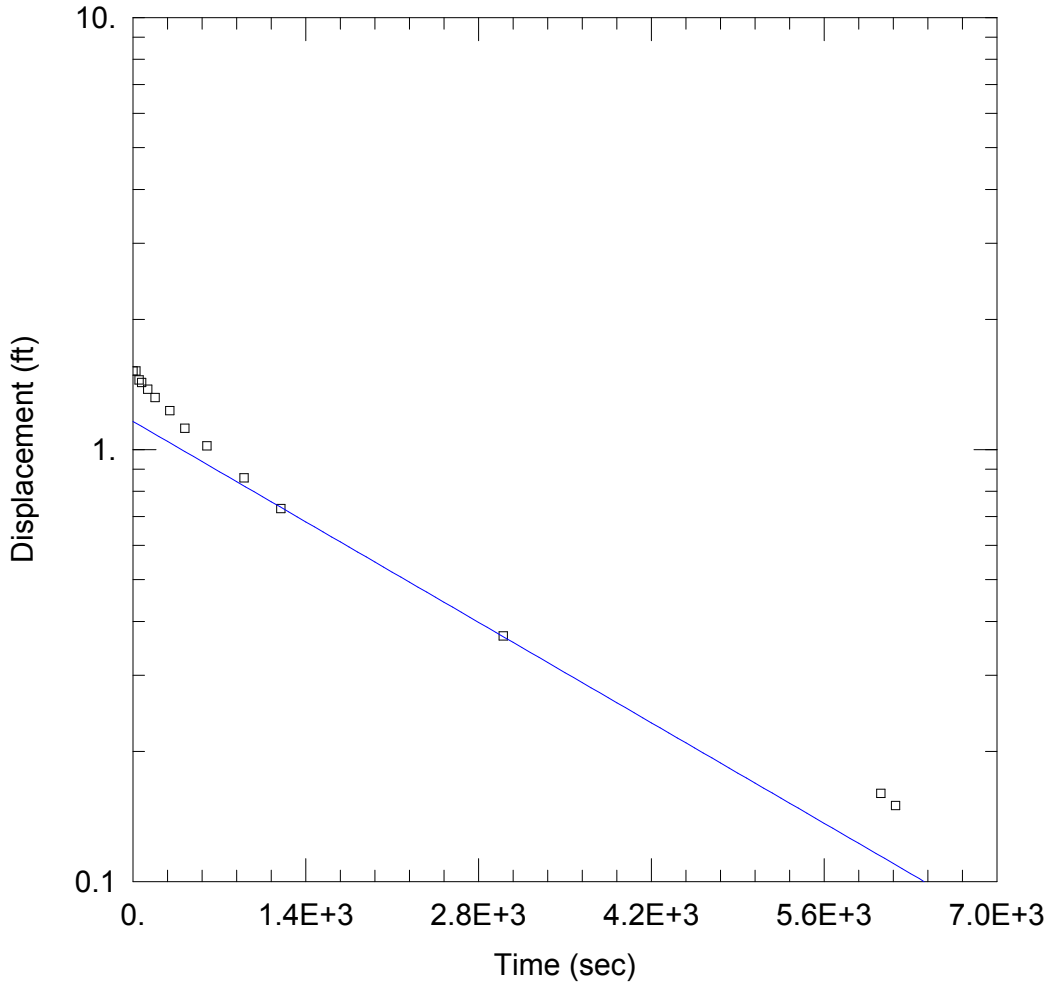
Saturated Thickness: 11.5 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-112-10)

Initial Displacement: 0.22 ft
Total Well Penetration Depth: 10.1 ft
Casing Radius: 0.08333 ft
Static Water Column Height: 10.1 ft
Screen Length: 10. ft
Well Radius: 0.34 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 0.0004669 cm/sec
y0 = 0.2229 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_112R_10.aqt
Date: 06/15/11 Time: 08:41:14

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-112R-10
Test Date: 4/25/2011

AQUIFER DATA

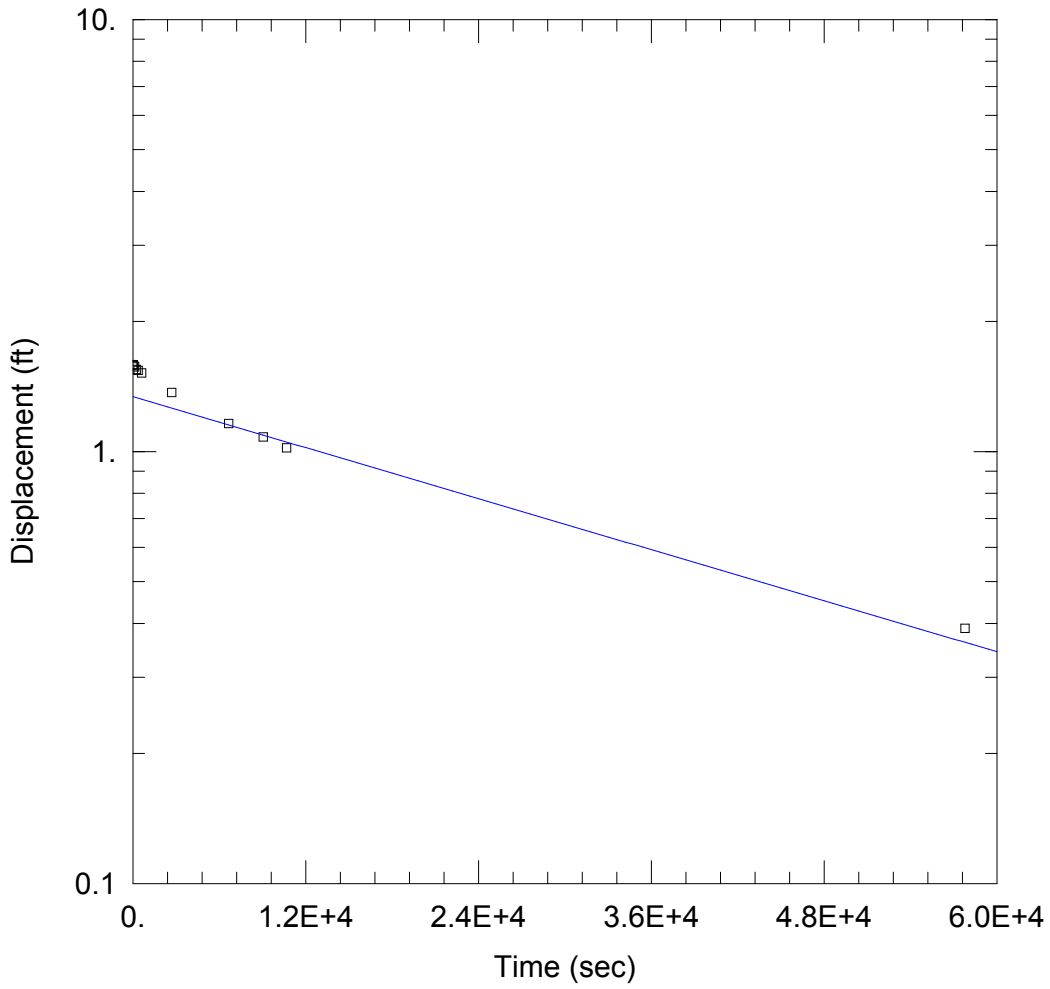
Saturated Thickness: 10. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-112R-10)

Initial Displacement: 1.52 ft
Total Well Penetration Depth: 28.94 ft
Casing Radius: 0.0833 ft
Static Water Column Height: 28.94 ft
Screen Length: 10. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 2.143E-5 cm/sec
y0 = 1.162 ft



WELL TEST ANALYSIS

Data Set: P:\National_Grid\Rensselaer\Hydrogeology\aqt\MW_113R_10.aqt
Date: 06/15/11 Time: 08:42:31

PROJECT INFORMATION

Company: Brown and Caldwell
Client: National Grid
Location: Rensselaer, NY
Test Well: MW-113R-10
Test Date: 4/25/2011

AQUIFER DATA

Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-113R-10)

Initial Displacement: 1.59 ft
Total Well Penetration Depth: 38.44 ft
Casing Radius: 0.08333 ft
Static Water Column Height: 38.44 ft
Screen Length: 10. ft
Well Radius: 0.166 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 1.149E-6 cm/sec y0 = 1.34 ft

Appendix E: Laboratory Data Packages (CD-ROM)

Appendix F: Data Usability Summary Reports (CD-ROM)

Appendix G: Electronic Data Deliverable (CD-ROM)