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Geotechnical
Environmental and
Water Resources
Engineering

Quarterly Groundwater Monitoring Report
Third Quarter (Q3) 2010

Glen Cove
Former MGP Site

City of Glen Cove
Nassau County, Long Island, New York
Site ID No. 1-30-089P

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1. Introduction and Site Background

This report presents the third quarter 2010 (Q3 2010) groundwater monitoring results for the Glen Cove Former Manufactured Gas Plant (MGP) Site located in Glen Cove, Nassau County, New York (the Site). This report has been prepared in accordance with the requirements of Section 6 of *DER-10* [Department of Environmental Remediation] *Technical Guidance for Site Investigation and Remediation*; the Order on Consent, Index No. D1-0001-98-11 signed by KeySpan Corporation (currently known as National Grid) and the New York State Department of Environmental Conservation (NYSDEC), and the *Remedial Action Plan, Glen Cove Former Manufactured Gas Plant, Town of Oyster Bay, Nassau Country, New York* (RAP) prepared by GEI Consultants, Inc. (GEI), dated March 2010.

The NYSDEC-approved remedy for the Site includes the excavation of shallow soils and offsite disposal of accessible MGP-related source material (or "hot spots"), groundwater treatment using oxygen injection technology, and the installation of recovery wells to remove mobile non-aqueous phase liquids (NAPL). Source material is defined in 6 NYCRR Part 375-1.2(au). For the purposes of this Site, source material consists of materials containing tar or oil-like materials, where individual droplets, pools, or stringers are visible to the naked eye. The current property owner, Long Island Power Authority (LIPA), is planning to conduct a facility upgrade which will include the installation of underground utilities, foundation, pilings, and associated electric equipment. LIPA is planning to upgrade this substation to meet the growing energy demand in the Glen Cove region.

As part of the long term monitoring of the remedy, National Grid has begun quarterly monitoring of the groundwater at the Site. These data will provide a seasonal baseline of groundwater analytical results to compare against post-remedy concentrations and evaluate the overall effectiveness of the remedial action.

1.1 Site Description and History

The Glen Cove Former MGP Site is an inverted L-shaped parcel of approximately 1.9 acres presently occupied by an active electrical substation which services Glen Cove and the surrounding area. Topographically, the Site is a flat depression bounded by approximately 20-foot high slopes to the north, south and east.

To the west, the property slopes downward approximately 20 feet to Glen Cove Creek, a channelized stream, which eventually discharges to Hempstead Bay. Glen Cove Creek flows in a general south to north direction along the western site property line. The creek leaves the property boundary at the northwest corner of the Site through a box culvert that directs

flow beneath the Long Island Rail Road (LIRR) tracks. The creek eventually discharges to Mosquito Cove (Hempstead Bay). A site location map is included as **Figure 1**.

MGP operations at the Site began in 1905 under the ownership of the Sea Cliff and Glen Cove Gas Company. Facility structures were located on the northern section of the property, and consisted of a 60,000 cubic foot gas holder, boilers, purifiers, retorts, coal shed, engine room, tar and oil tank, and approximately eight gas tanks. In 1929, the Long Island Lighting Company (LILCO) terminated MGP operations and demolished the facility's surface structures sometime thereafter. Site activities following 1929 consisted solely of natural gas storage in a Hortonsphere gas holder through the 1950s. The Hortonsphere was decommissioned and demolished between 1959 and 1966. A major electrical substation was constructed on the Site in the mid-1960s. In 1998, Brooklyn Union Gas (BUG) and LILCO merged to form the KeySpan Corporation, at which time the ownership of the substation was transferred to LIPA. In 2007, National Grid acquired responsibility for the former MGP property through the acquisition of KeySpan. Currently, the Site is owned by LIPA and operated by National Grid under contract to LIPA.

1.2 Geology

The shallow stratigraphy beneath the Site is compromised of heterogeneous fill and glacial outwash of Upper Pleistocene deposits. The stratigraphic sequence consists of outwash deposits overlain by heterogeneous fill. The heterogeneous fill across most of the Site ranges in thickness from approximately 10 feet throughout most of the former site to 30 feet in the offsite area just north of the Site boundary. The fill composition is primarily poorly sorted and highly permeable sand and gravel with varying percentages of gravel, silt, clay, and coal fragments. The glacial outwash deposits consist mainly of interbedded layers of permeable sand and gravel, and less permeable silty sand. The top of the glacial unit was encountered from approximately 10 feet below ground surface (ft bgs) on the central portion of the Site to approximately 32 ft bgs from the top of the railroad embankment. The ground surface elevation of the Site is significantly lower than the top of the railroad embankment, and when factoring in the ground surface elevation difference, the glacial deposits are encountered at similar elevations across the Site and beneath the railroad embankment.

Glen Cove Creek originally occupied a natural stream channel just to the west of the Site before it was channelized along its present route. The natural creek bed is indicated by the alluvial deposits consisting of reworked glacial outwash present along the western boundary of the Site. The alluvial deposits associated with the original stream channel consist of isolated sand and gravelly sand layers encountered in the upper 5 to 10 feet of soils at the western site boundary.

1.3 Hydrogeology

The groundwater beneath the Site is considered part of the regional Upper Glacial aquifer. Regionally, this aquifer is not used for drinking water. Drinking water for Long Island is provided by the deeper Magothy aquifer.

Groundwater elevations of site wells were similar for the shallow and intermediate wells ranging from about 43 to 53 feet above mean sea level (ft-msl). Groundwater elevation contours indicate a consistent groundwater flow direction to the west for the shallow zone wells (3 to 22 ft bgs) and the west-northwest for the intermediate zone (16 to 36 ft bgs). The water table surface of the shallow groundwater follows the general topography of the Site sloping from east to west. The hydraulic gradient is relatively steep (0.06 feet/foot) in the eastern and western portions of the Site and less steep (0.02 feet/foot) in the western portion of the Site with an average gradient of 0.04 feet/foot. A uniform hydraulic gradient of about 0.01 feet/foot is present in the intermediate groundwater across the Site. The estimated groundwater seepage flow velocities, assuming an effective porosity of 20 percent, were calculated for the shallow and intermediate aquifer zones as 0.044 and 0.001 feet per day (ft/day), respectively.

The potential vertical hydraulic gradients in the central portion of the Site indicate a downward potential vertical gradient. However, an upward potential vertical gradient was present along the Site's western boundary. Wells installed offsite to the north of the Site showed variable potential vertical hydraulic gradients, likely due to recharge from rainfall events.

1.4 Historical Groundwater Monitoring Event Summary

Three groundwater monitoring events were conducted at the Site prior to 2010. Groundwater sample collection and analysis and NAPL/groundwater measurements were conducted in 2004, 2005, and 2008.

The groundwater monitoring wells and piezometers were monitored for the presence of NAPL during the May 2004, and June, August and October 2005 product/water level measurement events. An electronic product/water interface probe was used to measure groundwater levels, light non-aqueous phase liquids (LNAPL), dense non-aqueous phase liquids (DNAPL), and total well depth. The product/water level measurement results indicated the absence of LNAPL from all of the wells monitored and the detection of DNAPL in one monitoring well, GCMW-13S. At monitoring well GCMW-13S, a DNAPL thickness of 0.74 feet was measured in June 2005. The DNAPL thickness decreased steadily to 0.54 and 0.34 feet in August and October 2005, respectively.

Total benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations, and total polycyclic aromatic hydrocarbon (PAH) concentrations from these historical sampling events are presented in **Figure 5**.

2. Glen Cove Site and Adjacent Offsite Areas

2.1 Q3 2010 Groundwater Monitoring Event Summary

Event Dates:	September 20 - 23, 2010
Site Phase:	Quarterly groundwater monitoring
Location:	The location of the Glen Cove Former MGP Site is depicted on **Figure 1**.

2.2 Monitoring Program

2.2.1 Number of Wells

A total of 21 monitoring wells and piezometers are currently located at or adjacent to the Site. Piezometer PZ-03 is believed to have been destroyed in 2007. Monitoring well and piezometer locations are depicted on **Figure 2**.

2.2.2 Hydrological Data

Groundwater levels were measured at 21 monitoring wells and piezometers. Depth to groundwater and calculated groundwater elevations are provided on **Table 1.** Shallow and intermediate groundwater contours for Q3 are depicted on **Figures 3** and **4**, respectively. The groundwater flow direction was generally to the west towards Glen Cove Creek. The ranges in depth to water and water table elevation data for the shallow and intermediate/deep portions of the aquifer in Q3 2010 are presented below.

Shallow Groundwater Zone

- Depth to the water table in shallow wells ranged from 4.15 (PZ-07) to 28.32 (GCMW-08S) feet below the well measuring point in Q3 2010.
- Water table elevations in shallow wells ranged from 45.60 (GCMW-15) to 53.11 (GCMW-12S) feet above mean sea level (MSL) in Q3 2010.
- The calculated shallow hydraulic gradient was 0.021 feet/foot in Q3 2010.

Intermediate/Deep Groundwater Zone

- Depth to groundwater in intermediate/deep wells ranged from 5.12 (GCMW-10I) to 27.30 (GCMW-08D) feet below the well measuring point in Q3 2010.
- Groundwater elevations in intermediate/deep wells ranged from 47.44 (GCMW-09I) to 51.52 (GCMW-08D) feet above MSL in Q3 2010.
- The calculated intermediate hydraulic gradient was 0.016 feet/foot in Q3 2010.

2.2.3 Groundwater Analytical Data

In Q3 2010, sampling of the site monitoring wells was conducted on September 20 through 23, 2010 and included all accessible wells on the quarterly sampling list. A total of 21 monitoring wells and piezometers were sampled for the following:

- BTEX and methyl tert butyl ether (MTBE) via Environmental Protection Agency (EPA) Method 8260
- PAHs and semi-volatile organic vapors (SVOCs) via EPA Method 8270

Chemical data for Q3 2010 is presented on **Table 2**. The Q3 2010 analytical results for total BTEX and total PAH are presented on **Figure 5**.

2.2.4 Chemical Data

- Total BTEX concentrations ranged from less than method detection limits in 16 of the 21 wells sampled, to 1,048 micrograms per liter (µg/L) in GCMW-11S in Q3 2010.
- Total PAH concentrations ranged from less than method detection limits in 12 of the 21 wells sampled, to 8,591 µg/L in GCMW-13S in Q3 2010.
- Detections of non-PAH SVOCs were sparse and associated with two SVOCs (carbazole and dibenzofuran) for which no groundwater standards exist.

2.3 Data Trend Analysis

Q1 2010 was the first groundwater monitoring event conducted at the Glen Cove Former MGP Site since 2008. Subsequent groundwater monitoring events will be conducted on a quarterly basis. Data trend analyses have been made based on prior sampling events conducted at the Site including 2004, 2005 and 2008 to provide a baseline comparison. Data trend analyses will continue on a quarterly basis to provide a more accurate understanding of site conditions.

In general, fairly consistent BTEX and PAH concentrations have been detected in shallow groundwater on and adjacent to the Site since the first sampling event in 2004. Decreases have been observed in the northwest portion of the Site in PZ-01A from 2004 to Q1 2010 for BTEX (223 µg/L to non-detect) and PAHs (581 to 2 µg/L).

Between 2008 and Q1 2010, BTEX concentrations decreased in four of the five wells that had detections. Minor increases in BTEX concentrations during 2008 to 2010 were observed in wells GCMW-09S (2 to 98 µg/L) and GCMW-11I (non-detect to 21 µg/L).

In Q1 2010, PAH concentrations were below laboratory detection limits in 13 of the 21 wells and piezometers sampled. Decreases in PAH concentrations were observed in four of the eight wells with detections, from 2008 to 2010. Notably, concentrations decreased during 2008 to 2010 in GCMW-11S (7,421 to 6,462 µg/L) and GCMW-13S (11,047 to 7,128 µg/L). Between 2008 and Q1 2010, PAH concentrations increased in two of the 21 wells and

piezometers sampled; from 14 to 180 µg/L in GWMW-08S and from 380 to 543 µg/L in GCMW-09S.

In Q3 2010, BTEX concentrations were detected in five of the 21 wells and piezometers. In one of the five wells (GCMW-09I), total BTEX concentrations were low, near groundwater standards. In the remaining wells (GCMW-11I at 47 ug/L, GCMW-9S at 65 ug/L, GCMW-13S at 939 ug/L, and GCMW-11S at 1,048 ug/L), the total BTEX concentrations were within the range of historical values. In GCMW-11I, the Q3 2010 concentrations constitute a decreasing trend when compared to historical concentrations. In GCMW-9S and GCMW-13S the historical concentrations fluctuated and no trend is apparent. In GCMW-11S, the Q3 2010 concentrations constitute a stable trend when compared to historical concentrations.

In Q3 2010, total PAH concentrations were below laboratory detection limits in 12 of the 21 wells and piezometers sampled. In four of the remaining nine wells, total PAH concentrations were low, near groundwater standards. In the remaining five wells, total PAH concentrations ranged between 286 ug/L in GCMW-9I to 8,591 ug/L in GCMW-13S. Decreasing total PAH trends are associated with two of these wells (GCMW-9I and GCMW-11I) when compared to historical concentrations. Historical total PAH concentrations fluctuate in GCMW-9S and no trend is discernable. In the remaining two wells with the highest total PAH concentrations (GCMW-11S and GCMW-13S), the associated concentration trends are stable when compared to historical concentrations.

It should be noted that no remediation activities have occurred at the Site between the sampling events and fluctuations in concentrations may be related to changes in the water table level, and other site conditions.

2.4 Future Plans

- Continue quarterly groundwater and NAPL monitoring at accessible monitoring wells.
- Phase 1 of planned remedial action activities is scheduled to begin in early Q1 2011 to remove shallow accessible source material at the Site.

Tables

Table 1
Water Level Measurements and Calculated Groundwater Elevations
Glen Cove Former MGP Site
Glen Cove, New York

Well ID	Date of Measurement	Screened Interval (feet bgs)	Time of Measurement	Well Casing Diameter (inches)	Well Elevation[1] (feet above MSL)	Depth to Water (feet)	Water Elevation (feet above MSL)	Notes
PZ-01A	9/23/2010	25 - 35	847	2.00	57.11	9.22	47.89	
PZ-02A	9/23/2010	18 - 21	906	2.00	58.58	11.47	47.11	
PZ-03*	-	14 - 19	-	-	56.76	-	NC	
PZ-04	9/23/2010	16 - 19	857	2.00	56.96	9.41	47.55	
PZ-05	9/23/2010	8 - 18	931	2.00	62.88	9.79	53.09	
PZ-06	9/23/2010	7 - 17	921	2.00	58.52	6.01	52.51	
PZ-07	9/23/2010	3 - 10	910	2.00	50.36	4.15	46.21	
GCMW-08S	9/23/2010	26 - 36	812	2.00	78.59	28.32	50.27	
GCMW-08D	9/23/2010	60 - 70	818	2.00	78.82	27.30	51.52	
GCMW-09S	9/23/2010	8 - 18	847	2.00	56.81	9.89	46.92	
GCMW-09I	9/23/2010	26 - 36	846	2.00	56.88	9.44	47.44	
GCMW-10S	9/23/2010	11 - 16	908	2.00	52.62	6.91	45.71	
GCMW-10I	9/23/2010	16 - 26	908	2.00	53.08	5.12	47.96	
GCMW-11S	9/23/2010	8 - 20	937	2.00	57.52	8.98	48.54	
GCMW-11I	9/23/2010	23 - 28	935	2.00	57.45	8.35	49.10	
GCMW-12S	9/23/2010	14 - 24	932	2.00	66.63	13.52	53.11	
GCMW-13S	9/23/2010	12 - 22	946	2.00	57.73	9.85	47.88	0.4' DNAPL
GCMW-13I	9/23/2010	25 - 30	947	2.00	57.73	9.31	48.42	
GCMW-14S	9/23/2010	8 - 18	903	2.00	58.74	11.68	47.06	
GCMW-14I	9/23/2010	25 - 30	904	2.00	58.75	11.02	47.73	
GCMW-15	9/23/2010	6 - 16	834	2.00	51.34	5.74	45.60	
GCMW-16	9/23/2010	6 - 16	829	2.00	51.29	5.06	46.23	

Notes:
bgs - Below Ground Surface
[1] - Well Elevations Obtained From 2008 RI
MSL - Mean Sea Level
NC - Not Collected
* Destroyed

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-08S 9/22/2010	GCMW-08D 9/22/2010	GCMW-09S 9/20/2010	GCMW-09I 9/20/2010	GCMW-10S 9/21/2010	GCMW-10I 9/21/2010	GCMW-11S 9/20/2010	GCMW-11I 9/20/2010
BTEX (ug/L)									
Benzene	1	10 U	10 U	**2 J**	10 U	10 U	10 U	**150**	**43**
Toluene	5	10 U	10 U	**2 J**	10 U	10 U	10 U	**28**	10 U
Ethylbenzene	5	10 U	10 U	**30**	10 U	10 U	10 U	**460**	10 U
Xylene, total	5	10 U	10 U	**31**	**1 J**	10 U	10 U	**410**	**4 J**
Total BTEX	NE	ND	ND	**65**	**1**	ND	ND	**1048**	**47**
Other VOCs (ug/L)									
Acetone	50*	10 U	10 U	10 U	3 U	10 U	10 U	10 U	10 U
Bromodichloromethane	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**2 J**
Butanone,2-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	60*	10 U	10 U	**2 J**	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	5	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	5	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	7	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethane,1,1-	5	10 U	10 U	**1 J**	10 U	10 U	10 U	**3 J**	10 U
Dichloroethane,1,2-	0.6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethene,1,1-	0.07	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethene,1,2- (total)	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropane,1,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropene, cis-1,3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropene, trans-1,3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexanone,2-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10*	10 U	**3 J**	10 U	**7 J**	10 U	10 U	**1 J**	**42**
Methyl-2-pentanone,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-08S 9/22/2010	GCMW-08D 9/22/2010	GCMW-09S 9/20/2010	GCMW-09I 9/20/2010	GCMW-10S 9/21/2010	GCMW-10I 9/21/2010	GCMW-11S 9/20/2010	GCMW-11I 9/20/2010
Styrene	5	10 U	10 U	10 U	10 U	10 U	10 U	**6 J**	10 U
Tetrachloroethane,1,1,2,2-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	5	10 U	10 U	10 U	**5 J**	**2 J**	**11**	10 U	**2 J**
Trichloroethane,1,1,1-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethane,1,1,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	2	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total VOCs	NE	ND	**3**	**68**	**13**	**2**	**11**	**1058**	**93**
Non-carcinogenic PAHs (ug/L)									
Acenaphthene	20*	10 U	10 U	**58**	**10**	10 U	10 U	**200 J**	10 U
Acenaphthylene	NE	10 U	10 U	**2 J**	**23**	10 U	10 U	**20**	10 U
Anthracene	50*	10 U	10 U	**9**	**10**	10 U	10 U	**11**	10 U
Benzo[g,h,i]perylene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50*	**1 J**	10 U	**7**	**11**	10 U	10 U	**5**	10 U
Fluorene	50*	10 U	10 U	**33**	10 U	10 U	10 U	**73**	10 U
Methylnaphthalene,2-	NE	10 U	10 U	**8**	**7**	10 U	10 U	**230 J**	**7**
Naphthalene	10*	10 U	10 U	**330**	**120**	10 U	10 U	**4400**	**610**
Phenanthrene	50*	**1 J**	10 U	**40**	**94**	10 U	10 U	**92 J**	10 U
Pyrene	50*	**2 J**	10 U	**8**	**11**	10 U	10 U	**5**	10 U
Carcinogenic PAHs (ug/L)									
Benz[a]anthracene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[a]pyrene	ND	**1 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[b]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz[a,h]anthracene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno[1,2,3-cd]pyrene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAHs (ug/L)									
Total PAHs	NE	**5**	ND	**495**	**286**	ND	ND	**5036**	**617**

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-08S 9/22/2010	GCMW-08D 9/22/2010	GCMW-09S 9/20/2010	GCMW-09I 9/20/2010	GCMW-10S 9/21/2010	GCMW-10I 9/21/2010	GCMW-11S 9/20/2010	GCMW-11I 9/20/2010
Other SVOCs (ug/L)									
Bis(2-chloroethoxy)methane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(chloroisopropyl)ether	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromophenyl phenyl ether,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	NE	10 U	10 U	10 U	10 U	10 U	10 U	**34**	10 U
Chloro-3-methylphenol,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroaniline,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloronaphthalene,2-	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorophenol,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorophenyl phenyl ether,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	NE	10 U	10 U	**7**	**4 J**	10 U	10 U	**12**	10 U
Dichlorobenzene,1,2-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,3-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,4-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzidine,3,3-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorophenol,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethylphenol, 2,4-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dinitro-2-methylphenol,4,6-	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dinitrophenol,2,4-	10*	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dinitrotoluene,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dinitrotoluene,2,6-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-08S 9/22/2010	GCMW-08D 9/22/2010	GCMW-09S 9/20/2010	GCMW-09I 9/20/2010	GCMW-10S 9/21/2010	GCMW-10I 9/21/2010	GCMW-11S 9/20/2010	GCMW-11I 9/20/2010
Hexachlorobenzene	0.04	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	0.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol, 4-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitroaniline,2-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitroaniline,3-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitroaniline,4-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitrobenzene	0.4	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrophenol,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrophenol,4-	NE	25 U	25 U	25 U	25 U	25 U	25 UJ	25 U	25 U
N-Nitrosodi-n-propylamine	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	1	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Phenol	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorobenzene,1,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorophenol,2,4,5-	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Trichlorophenol,2,4,6-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-12S 9/23/2010	GCMW-13S 9/23/2010	GCMW-13I 9/23/2010	GCMW-14S 9/21/2010	GCMW-14I 9/21/2010	GCMW-15 9/22/2010	Duplicate of: GCMW-15 9/22/2010	GCMW-16 9/22/2010
BTEX (ug/L)									
Benzene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	5	10 U	**39**	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5	10 U	**330**	10 U	10 U	10 U	10 U	10 U	10 U
Xylene, total	5	10 U	**570**	10 U	10 U	10 U	10 U	10 U	10 U
Total BTEX	NE	ND	**939**	ND	ND	ND	ND	ND	ND
Other VOCs (ug/L)									
Acetone	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butanone,2-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	60*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	5	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 U
Chlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	5	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ	10 U	10 UJ
Chloroform	7	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethane,1,1-	5	10 U	10 U	10 U	10 U	10 U	**1 J**	**1 J**	10 U
Dichloroethane,1,2-	0.6	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethene,1,1-	0.07	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**1 J**
Dichloroethene,1,2- (total)	NE	10 U	10 U	10 U	10 U	10 U	**3 J**	**4 J**	**5 J**
Dichloropropane,1,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropene, cis-1,3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropene, trans-1,3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexanone,2-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10*	10 U	**5 J**	**22**	10 U	10 U	10 U	10 U	10 U
Methyl-2-pentanone,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-12S 9/23/2010	GCMW-13S 9/23/2010	GCMW-13I 9/23/2010	GCMW-14S 9/21/2010	GCMW-14I 9/21/2010	GCMW-15 9/22/2010	Duplicate of: GCMW-15 9/22/2010	GCMW-16 9/22/2010
Styrene	5	10 U	**21**	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethane,1,1,2,2-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	5	10 U	10 U	**3 J**	10 U	**1 J**	10 U	10 U	**3 J**
Trichloroethane,1,1,1-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethane,1,1,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	5	10 U	10 U	10 U	10 U	10 U	**1 J**	**1 J**	**8 J**
Vinyl chloride	2	10 U	10 U	10 U	10 U	10 U	**7 J**	**6 J**	10 U
Total VOCs	NE	ND	**965**	**25**	ND	**1**	**12**	**12**	**17**
Non-carcinogenic PAHs (ug/L)									
Acenaphthene	20*	10 U	**170 J**	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NE	10 U	**28**	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	50*	10 U	**10**	**2 J**	10 U	10 U	10 U	10 U	10 U
Benzo[g,h,i]perylene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50*	10 U	**6**	**5**	10 U	**1 J**	10 U	10 U	10 U
Fluorene	50*	10 U	**56**	10 U	10 U	10 U	10 U	10 U	10 U
Methylnaphthalene,2-	NE	10 U	**650 J**	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10*	10 U	**7600**	10 U	**2 J**	10 U	10 U	10 U	10 U
Phenanthrene	50*	10 U	**66**	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	50*	10 U	**5**	**2 J**	10 U	10 U	10 U	10 U	10 U
Carcinogenic PAHs (ug/L)									
Benz[a]anthracene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[a]pyrene	ND	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[b]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz[a,h]anthracene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno[1,2,3-cd]pyrene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAHs (ug/L)									
Total PAHs	NE	ND	**8591**	**9**	**2**	**1**	ND	ND	ND

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-12S 9/23/2010	GCMW-13S 9/23/2010	GCMW-13I 9/23/2010	GCMW-14S 9/21/2010	GCMW-14I 9/21/2010	GCMW-15 9/22/2010	Duplicate of: GCMW-15 9/22/2010	GCMW-16 9/22/2010
Other SVOCs (ug/L)									
Bis(2-chloroethoxy)methane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(chloroisopropyl)ether	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromophenyl phenyl ether,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	NE	10 U	**9**	10 U	10 U	10 U	10 U	10 U	10 U
Chloro-3-methylphenol,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroaniline,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloronaphthalene,2-	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorophenol,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorophenyl phenyl ether,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	NE	10 U	**10**	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,2-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,3-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,4-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzidine,3,3-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorophenol,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethylphenol, 2,4-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dinitro-2-methylphenol,4,6-	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dinitrophenol,2,4-	10*	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dinitrotoluene,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dinitrotoluene,2,6-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	GCMW-12S 9/23/2010	GCMW-13S 9/23/2010	GCMW-13I 9/23/2010	GCMW-14S 9/21/2010	GCMW-14I 9/21/2010	GCMW-15 9/22/2010	Duplicate of: GCMW-15 9/22/2010	GCMW-16 9/22/2010
Hexachlorobenzene	0.04	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	0.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol, 4-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitroaniline,2-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitroaniline,3-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitroaniline,4-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitrobenzene	0.4	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrophenol,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrophenol,4-	NE	25 UJ	25 UJ	25 UJ	25 U	25 U	25 U	25 U	25 U
N-Nitrosodi-n-propylamine	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	1	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Phenol	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorobenzene,1,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorophenol,2,4,5-	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Trichlorophenol,2,4,6-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	PZ-01A 9/20/2010	PZ-02A 9/21/2010	Duplicate of: PZ-02A 9/21/2010	PZ-04 9/21/2010	PZ-05 9/23/2010	PZ-06 9/23/2010	PZ-07 9/21/2010
BTEX (ug/L)								
Benzene	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene, total	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total BTEX	NE	ND	ND	ND	ND	ND	ND	ND
Other VOCs (ug/L)								
Acetone	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butanone,2-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	60*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	5	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	10 UJ
Chlorobenzene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	5	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	10 UJ
Chloroform	7	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethane,1,1-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethane,1,2-	0.6	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloroethene,1,1-	0.07	10 U	10 U	10 U	10 U	10 U	10 U	**1 J**
Dichloroethene,1,2- (total)	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropane,1,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropene, cis-1,3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichloropropene, trans-1,3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexanone,2-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	10*	10 U	10 U	10 U	**1 J**	10 U	10 U	10 U
Methyl-2-pentanone,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	PZ-01A 9/20/2010	PZ-02A 9/21/2010	Duplicate of: PZ-02A 9/21/2010	PZ-04 9/21/2010	PZ-05 9/23/2010	PZ-06 9/23/2010	PZ-07 9/21/2010
Styrene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethane,1,1,2,2-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	5	**4 J**	10 U	10 U	10 U	10 U	10 U	**23**
Trichloroethane,1,1,1-	5	10 U	10 U	10 U	**1 J**	10 U	10 U	10 U
Trichloroethane,1,1,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	5	10 U	10 U	10 U	10 U	10 U	10 U	**2 J**
Vinyl chloride	2	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total VOCs	NE	**4**	ND	ND	**2**	ND	ND	**26**
Non-carcinogenic PAHs (ug/L)								
Acenaphthene	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[g,h,i]perylene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylnaphthalene,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carcinogenic PAHs (ug/L)								
Benz[a]anthracene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[a]pyrene	ND	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[b]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo[k]fluoranthene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz[a,h]anthracene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno[1,2,3-cd]pyrene	0.002*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAHs (ug/L)								
Total PAHs	NE	ND	ND	ND	ND	ND	ND	ND

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	PZ-01A 9/20/2010	PZ-02A 9/21/2010	Duplicate of: PZ-02A 9/21/2010	PZ-04 9/21/2010	PZ-05 9/23/2010	PZ-06 9/23/2010	PZ-07 9/21/2010
Other SVOCs (ug/L)								
Bis(2-chloroethoxy)methane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(chloroisopropyl)ether	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromophenyl phenyl ether,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloro-3-methylphenol,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroaniline,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloronaphthalene,2-	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorophenol,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorophenyl phenyl ether,4-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,2-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,3-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzene,1,4-	3	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorobenzidine,3,3-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dichlorophenol,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethylphenol, 2,4-	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dinitro-2-methylphenol,4,6-	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dinitrophenol,2,4-	10*	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dinitrotoluene,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dinitrotoluene,2,6-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octyl phthalate	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 2
Groundwater Analytical Results - Q3 2010
Glen Cove Former MGP Site
Glen Cove, New York

Validated

Sample Name: / Sample Date:	NYS AWQS	PZ-01A 9/20/2010	PZ-02A 9/21/2010	Duplicate of: PZ-02A 9/21/2010	PZ-04 9/21/2010	PZ-05 9/23/2010	PZ-06 9/23/2010	PZ-07 9/21/2010
Hexachlorobenzene	0.04	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	0.5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol, 4-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol,2-	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitroaniline,2-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitroaniline,3-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitroaniline,4-	5	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Nitrobenzene	0.4	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrophenol,2-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrophenol,4-	NE	25 U	25 UJ	25 U	25 U	25 UJ	25 UJ	25 U
N-Nitrosodi-n-propylamine	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	1	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Phenol	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorobenzene,1,2,4-	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichlorophenol,2,4,5-	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Trichlorophenol,2,4,6-	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Notes:

ug/L - micrograms per liter or parts per billion (ppb)
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
Total BTEX and Total VOCs are calculated using detects only.

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard

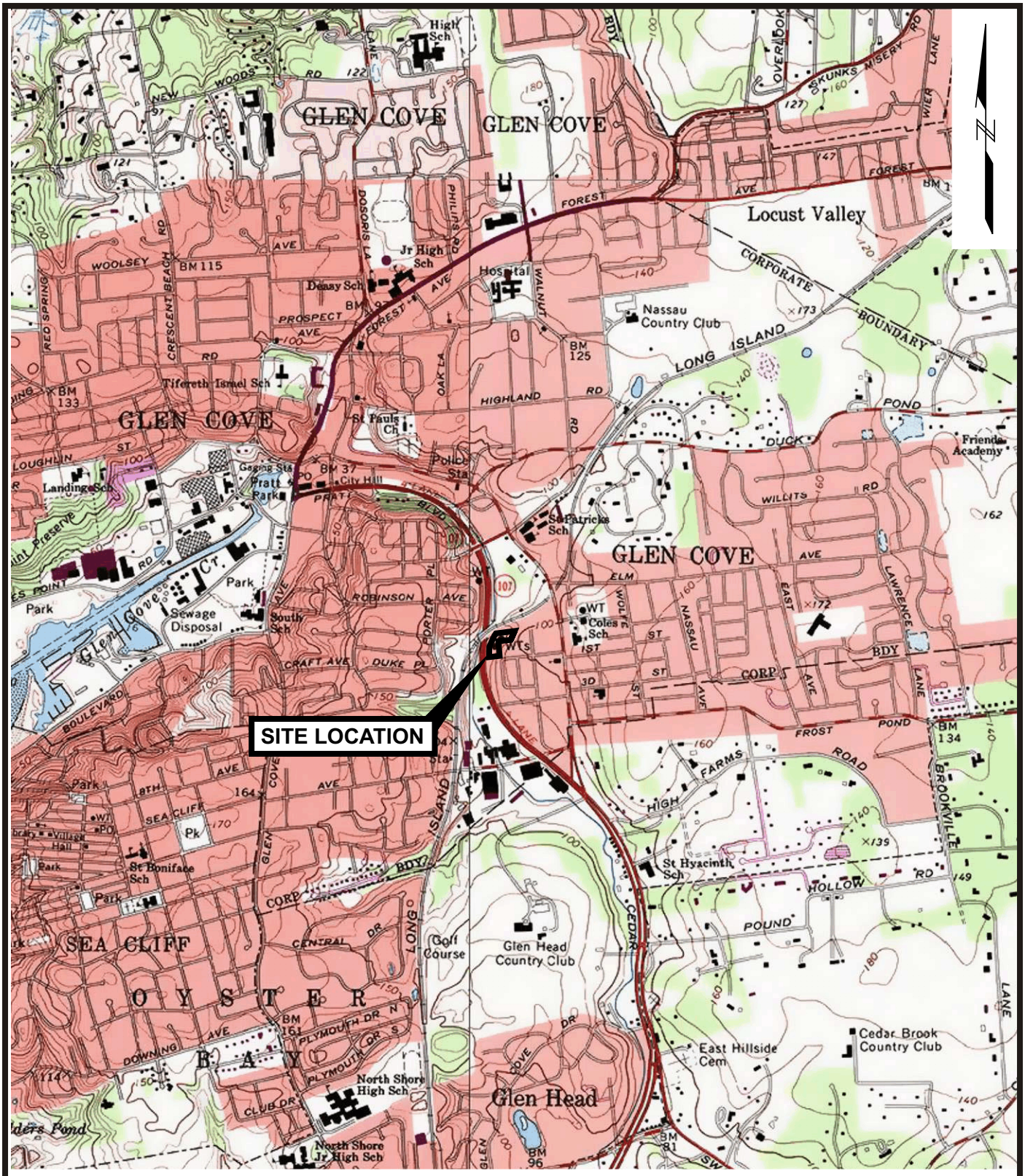
NE - not established
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Bolding indicates a detected concentration
Shading and bolding indicates that the detected concentration is above the NYS AWQS objective it was compared to

Validation Qualifiers:

J - estimated value
U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated

Figures



SOURCE: MAP CREATED WITH TOPO!™ 2000 WILDFLOWER PRODUCTIONS (www.topo.com)

GLEN COVE FORMER MGP SITE
GLEN COVE, NEW YORK

nationalgrid

GEI Consultants

SITE LOCATION MAP

Project 093270-5-1504 | December 2010 | Figure 1

I:\Project\National Grid\GLEN COVE\GW Monitoring\2010\Figures\GLEN-LOCATION.CDR

LEGEND:

- PROPERTY BOUNDARIES
- FORMER STRUCTURES (REMOVED OR DESTROYED)
- GCMW10S — MONITORING WELL LOCATION
- PZ07 — PIEZOMETER LOCATION
- PZ03 — PIEZOMETER LOCATION (DESTROYED)

N

LONG ISLAND RAILROAD

ROUTE 107

SHOULDER

SHOULDER

RETAINING WALL

CULVERT HEADWALL

CREEK

COVE

GLEN

GCMW08S

GCMW08D

TOP

SLOPE

BOTTOM

BOTTOM SLOPE

PZ06

PZ03

GCMW11S

GCMW11I

CONTROL HOUSE

TAR TANK

BOILER

COAL SHED

RETORTS

CESSPOOL

GCMW12S

PZ05

CONCRETE SLAB WITH STEEL SUPER-STRUCTURE

PURIFIER

CONCRETE SLAB WITH STEEL SUPER-STRUCTURE

OIL TANK

OIL TANK

ENGINE ROOM

PZ01A

RETAINING WALL

GCMW09S

GCMW09I

GAS TANKS

GCMW13I

GCMW13S

60,000 cu ft GAS HOLDER

GCMW14I

GCMW14S

GAS TANKS

PZ04

RETAINING WALL

RETAINING WALL

GCMW15

PZ02A

GCMW16

GCMW10I

GCMW10S

METER HOUSE

TOP SLOPE

40,000 cu ft GAS HOLDER (HORTONSPHERE)

PZ07

ACCESS ROAD

TOP SLOPE

0 20 40

SCALE, FEET

GLEN COVE FORMER MGP SITE
GLEN COVE, NEW YORK

nationalgrid

PROJECT 093270-5-1504

GEI Consultants
110 WALT WHITMAN ROAD
SUITE 204
HUNTINGTON STATION, NY 11746

MONITORING WELL LOCATION MAP

December 2010 Figure 2

I:\Project\National Grid\GLEN COVE\GW Monitoring\2010\Glen Cove-Well Location 11-10.dwg

LEGEND:

- PROPERTY BOUNDARIES
- FORMER STRUCTURES (REMOVED OR DESTROYED)
- GCMW10S — MONITORING WELL LOCATION
- PZ07 — PIEZOMETER LOCATION
- PZ03 — PIEZOMETER LOCATION (DESTROYED)
- 52 — GROUNDWATER CONTOUR (FEET RELATIVE TO MSL)
- 47.06 — GROUNDWATER ELEVATION (FEET RELATIVE TO MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

N

LONG ISLAND RAILROAD

ROUTE 107

GLEN COVE CREEK

GCMW08S 50.27

GCMW11S 48.54

PZ03

PZ06 52.51

GCMW12S 53.11

GCMW09S 46.92

GCMW13S 47.88

GCMW14S 47.06

GCMW10S 45.71

PZ07 46.21

50 52 48 46

TOP SLOPE

BOTTOM SLOPE

RETAINING WALL

CONCRETE SLAB WITH STEEL SUPER-STRUCTURE

CONTROL HOUSE

TAR TANK

BOILER

COAL SHED

RETORTS

CESSPOOL

PURIFIER

ENGINE ROOM

OIL TANK

EXCAVATION 6

EXCAVATION 7

EXCAVATION 5

GAS TANKS

60,000 cu ft GAS HOLDER

40,000 cu ft GAS HOLDER (HORTONSPHERE)

METER HOUSE

ACCESS ROAD

CULVERT HEADWALL

SHOULDER

FLOW

0 20 40

SCALE, FEET

GLEN COVE FORMER MGP SITE
GLEN COVE, NEW YORK

nationalgrid

PROJECT 093270-5-1504

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SUITE 204
HUNTINGTON STATION, NY 11746

GROUNDWATER CONTOUR MAP
SHALLOW WELLS
SEPTEMBER 23, 2010

December 2010 Figure 3

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LEGEND:

- PROPERTY BOUNDARIES
- FORMER STRUCTURES (REMOVED OR DESTROYED)
- GCMW10I — MONITORING WELL LOCATION
- PZ02A — PIEZOMETER LOCATION
- PZ03 — PIEZOMETER LOCATION (DESTROYED)
- 48 — GROUNDWATER CONTOUR (FEET RELATIVE TO MSL)
- 47.89 — GROUNDWATER ELEVATION (FEET RELATIVE TO MSL)
- APPROXIMATE GROUNDWATER FLOW DIRECTION

0 20 40
SCALE, FEET

GLEN COVE FORMER MGP SITE
GLEN COVE, NEW YORK

nationalgrid

PROJECT 093270-5-1504

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HUNTINGTON STATION, NY 11746

GROUNDWATER CONTOUR MAP
INTERMEDIATE WELLS
SEPTEMBER 23, 2010

December 2010 Figure 4

I:\Project\National Grid\GLEN COVE\GW Monitoring\2010\Glen Cove-GW Report 11-2010.dwg

Sample ID:	GCMW-11S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	1003	1776	1319	1163	1070	1048
PAHs (µg/L)	6523	4455	7421	6462	4964	5036

Sample ID:	PZ-01A					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	223	116	4	ND	ND	ND
PAHs (µg/L)	581	199	7	2	ND	ND

Sample ID:	GCMW-09S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	30	133	2	98	118	65
PAHs (µg/L)	305	272	380	543	1907	495

Sample ID:	GCMW-09I					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	38	9	35	ND	ND	1
PAHs (µg/L)	1564	633	281	55	342	286

Sample ID:	GCMW-13I					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	438	25	ND	ND	ND	ND
PAHs (µg/L)	3748	48	ND	25	ND	9

Sample ID:	GCMW-13S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	456	NS	1327	564	836	939
PAHs (µg/L)	4495	NS	11047	7128	10498	8591

Sample ID:	GCMW-14I					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	10	ND	ND	ND	ND	1

Sample ID:	GCMW-14S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	3	ND	ND	ND	ND	ND
PAHs (µg/L)	9	ND	21	ND	ND	2

Sample ID:	GCMW-15					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	NS	ND	ND	ND	ND	ND
PAHs (µg/L)	NS	10	ND	2	3	ND

Sample ID:	PZ-02A					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	ND	ND	ND	ND	ND	ND

Sample ID:	GCMW-16					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	NS	ND	ND	ND	ND	ND
PAHs (µg/L)	NS	ND	ND	ND	ND	ND

Sample ID:	GCMW-10I					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	ND	ND	ND	ND	ND	ND

Sample ID:	GCMW-10S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	ND	ND	ND	ND	ND	ND

Sample ID:	PZ-07					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	3	ND	ND	ND	ND	ND
PAHs (µg/L)	ND	ND	ND	ND	ND	ND

Sample ID:	GCMW-11I					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	1062	275	ND	21	34	47
PAHs (µg/L)	1488	16	5	ND	ND	617

Sample ID:	PZ-03					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	NS	221	NS	NS	NS	NS
PAHs (µg/L)	NS	1242	NS	NS	NS	NS

Sample ID:	GCMW-08D					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	2	ND	ND
PAHs (µg/L)	10	ND	ND	ND	ND	ND

Sample ID:	GCMW-08S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	1	ND	ND	ND	ND	ND
PAHs (µg/L)	346	282	14	180	229	5

Sample ID:	PZ-06					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	NS	ND	ND	ND
PAHs (µg/L)	ND	3	ND	ND	ND	ND

Sample ID:	GCMW-12S					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	6	1	ND	ND	ND	ND

Sample ID:	PZ-05					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	ND	1	ND	ND	ND	ND

Sample ID:	PZ-04					
Sample Date:	2004	2005	Feb-08	Mar-10	Jun-10	Sep-10
BTEX (µg/L)	ND	ND	ND	ND	ND	ND
PAHs (µg/L)	11	3	ND	ND	ND	ND

LONG ISLAND RAILROAD
ROUTE 107
GLEN COVE CREEK
SHOULDER
CULVERT HEADWALL
RETAINING WALL
GCMW11S
GCMW11I
PZ03
PZ01A
GCMW09S
GCMW09I
GCMW13I
GCMW13S
GCMW14I
GCMW14S
GCMW15
PZ02A
GCMW16
GCMW10I
GCMW10S
PZ07
PZ04
GCMW08D
GCMW08S
PZ06
GCMW12S
PZ05
TOP SLOPE
BOTTOM SLOPE
CONTROL HOUSE
TAR TANK
BOILER
COAL SHED
RETORTS
CESSPOOL
CONCRETE SLAB WITH STEEL SUPER-STRUCTURE
PURIFIER
ENGINE ROOM
OIL TANK
GAS TANKS
60,000 cu ft GAS HOLDER
40,000 cu ft GAS HOLDER (HORTONSPHERE)
METER HOUSE
ACCESS ROAD

N

0 20 40
SCALE, FEET

LEGEND:

- PROPERTY BOUNDARIES
- FORMER STRUCTURES (REMOVED OR DESTROYED)
- GCMW10S — MONITORING WELL LOCATION
- PZ07 — PIEZOMETER LOCATION
- PZ03 — PIEZOMETER LOCATION (DESTROYED)
- NS — NOT SAMPLED
- ND — NOT DETECTED
- PAHs — POLYCYCLIC AROMATIC HYDROCARBONS
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE, XYLENE

GLEN COVE FORMER MGP SITE
GLEN COVE, NEW YORK

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GROUNDWATER ANALYTICAL RESULTS (µg/L)

December 2010 Figure 5

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