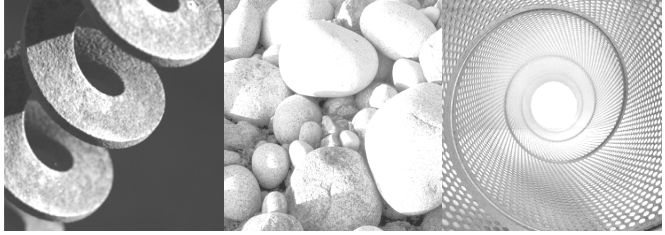

GEI Consultants

Consulting
Engineers and
Scientists

Groundwater Monitoring Report
November 2021 (Q4-2021) Annual Sampling Event

Rockaway Park Former MGP Site

Rockaway Park
Queens County, New York
Order on Consent Index No. D1-0002-98-11
Site No. 2-41-029

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1. Introduction and Site Background

This report presents the late November into December 2021 groundwater monitoring results for the Rockaway Park Former Manufactured Gas Plant (MGP) site located in Rockaway Park, Queens County, New York (the Site) (Figure 1). This report has been prepared in accordance with the requirements of Section 6 of DER-10 (Division of Environmental Remediation) Technical Guidance for Site Investigation and Remediation; the Order on Consent, Index No. D1-0002-98-11 signed by National Grid Corporation (National Grid) and the New York State Department of Environmental Conservation (NYSDEC), and the Draft Site Management Plan (SMP), Rockaway Park Former Manufactured Gas Plant, Rockaway Park, New York prepared by GEI Consultants, Inc. P.C. (GEI), dated March 2017.

1.1 Site Description

The former MGP and former electric substation are identified as Block 16166 and Lot 155 and the majority of Lot 110 on the Queens Tax Map (herein referred to as the "On-Site Property"). The On-Site Property is an approximately 8.9-acre area and is bounded by Beach Channel Drive to the north, Rockaway Freeway to the south, Beach 108th Street to the east, and Rockaway Freeway to the west (Figure 2).

The bulkhead area, which was historically used for off-loading of coal for the former Gas Works, is located North of the On-Site Property. This property, located north of Beach Channel Drive between Rockaway Freeway and Beach 108th Street, is identified as Block 16166 Lot 177 on the Queens Tax Map (herein referred to as the "Off-Site Property"). The Off-Site Property is an approximately 1.0-acre area and is bounded by Jamaica Bay to the north, and Beach Channel Drive to the south (Figure 2). National Grid does not own the Off-Site Property.

1.2 Site History

The Rockaway MGP began operations in the late 1870s. The plant was operated by Rockaway Electric Light Co., Town of Hempstead Gas & Electric Company, and later the Queensboro Gas and Electric Company from the late 1870s to 1926. In 1926, Queensboro Gas and Electric Company became a subsidiary of the Long Island Lighting Company (LILCO). LILCO operated the plant from 1926 to approximately 1958, when most of the facilities were demolished. In 1998, KeySpan Corporation acquired the former MGP property through a merger of LILCO and Brooklyn Union Gas Company.

In 1894, the plant consisted of two gas holders, a generator, purifiers, and scrubbers. The records indicate that the MGP operated carbureted water gas and coal carbonization

processes during early gas production. After 1905, the carbureted water gas process was the only process used during gas production. In 1912, the MGP expanded to the north and east and a portion of the southern property boundary was located beneath the present Rockaway Freeway. The plant now included a half-million cubic foot gas holder, several oxide tanks, generator and boiler buildings, engine room, several oil tanks, and a condenser.

The plant expanded in the mid-1920s to a strip of land to the north of the existing plant. This land was created when Jamaica Bay was filled in during Beach Channel Drive Construction. In 1933, the plant configuration included several additional structures that could allow increased gasification, tar and oil separation and storage, and coke and gas storage. These structures included a 2-million cubic foot gas holder, drip oil tanks, skimming basin, condensers, oxide enclosure, generator ash storage bin, tar separator, tar settling and drying tanks, and tar de-emulsifier. The MGP ceased operations in 1957 and was demolished in 1958.

Five industrial supply wells were formerly located on the MGP property. A mixture of clay, liquid mud, and cement were used to abandon these wells. Three of the wells were abandoned in the 1930s and the abandonment dates of the other two wells are not known.

In October 2002, the NYSDEC approved National Grid's request to reclassify the northwestern portion of the Rockaway Park former MGP site on the Registry of Inactive Hazardous Waste Disposal Sites. This portion of the Site is the current active substation. It was delisted based on investigation results and a risk assessment which concluded that the construction worker subsurface-soil exposure in the proposed substation area did not pose an unacceptable carcinogenic health threat or non-cancer health hazard.

1.3 Site Remedy

The NYSDEC-approved remedy for the Site involved four components. The following is a summary of the Remedial Actions performed at the Site:

A shallow excavation was completed to the approximate depth of the water table at 8-feet below grade at the Site. Outside of the shallow excavation limits, the upper 2 feet of material was removed to accommodate the installation of the On-Site Soil Cover System. Approximately 165,292 tons of material was excavated and disposed of off-site.

A composite dense non-aqueous phase liquid (DNAPL) migration barrier was constructed at the Site to contain impacted materials at the Site. The location of composite On-Site DNAPL migration barrier is depicted in Figure 2 and consists of the following components:

- A 695-foot-long Waterloo Barrier® sheet pile barrier was installed. The Waterloo Barrier® sheet piling was installed to depths of 50 feet on the flanks and 60 feet in the center of the wall.
- Soil-cement jet grout columns were installed to a depth of approximately 120 feet below ground surface (ft bgs) with a continuous 5-foot wall overlap with the 250-foot-long center section of the Waterloo Barrier® sheet piles.

The Off-Site DNAPL migration barrier consists of a 137-foot-long Waterloo Barrier® sheet pile barrier. The Waterloo Barrier® sheet piling was installed to depths of 60 to 70 feet bgs.

A Cover System was installed on both the On-Site and Off-Site Properties.

- The On-Site Soil Cover System consists of an 18-inch layer of well graded sandy soil material overlain with 6 inches of 2.5-inch crushed stone and underlain with a fabric demarcation barrier between the On-Site Soil Cover System and the subgrade materials.
- The Off-Site Composite Cover System consists of either a 24-inch layer of clean fill meeting the Restricted Residential Use SCOs underlain with a fabric demarcation barrier between the Composite Cover System and the subgrade materials or an asphalt/concrete surface, underlain with 6-inches of clean fill and a fabric demarcation barrier.

Forty-one passive DNAPL recovery wells were installed. One of the recovery wells was destroyed in 2015 and was not replaced with approval from the NYSDEC. The locations of the remaining 40 recovery wells are depicted in Figure 2.

In accordance with the Decision Document and the Draft SMP, National Grid began annual post-remedy monitoring of the groundwater at the Site in the Fourth Quarter of 2016 (Q4 2016). This data provides a baseline of groundwater analytical results following completion of the remedy to evaluate the overall effectiveness of the remedial action.

1.4 Geology

Three major stratigraphic units were identified during the Remedial Investigation (RI) and Final RI drilling program:

- Recent/post glacial fill
- Barrier island deposits
- Glacial outwash deposits

A general description of the three stratigraphic units is provided below.

Fill Material

Fill material is distributed throughout the site investigation areas and was placed in a series of land area expansions from approximately the 1800s to the 1930s. The Sanborn Fire Insurance maps indicate that approximately the northern two-thirds of the site investigation areas were part of Jamaica Bay in 1894. Retaining wall remnants are still present at the Site and mark former bulkheads that supported these filling activities.

Fill material observed at the site consisted primarily of sand with minor amounts of finer and coarser material. The fill material also includes variable amounts of coal, tar coke, clinkers, slag wood, concrete, brick, ash, glass, and crushed shell fragments. Fill materials were encountered to approximately 10 to 15 ft bgs in most of the site areas. Fill was observed to approximately 30 ft bgs in the bulkhead area.

Barrier Island Deposits

Underlying the fill unit throughout much of the Site are sandy, shell-bearing deposits interpreted as recent near-shore, beach, and dune deposits. These are identified as the barrier island deposits. The barrier island deposits contain minor amounts of silt and clay lenses. In addition, shell-bearing layers ranging from approximately 2 to 29 feet thick were observed. These layers sometimes contained coarser sand and gravels. The barrier island deposits were observed through the depths of most borings in the Site investigation areas. The deposits are approximately 55 to 70 feet thick throughout the Site.

Underlying the barrier island deposits at approximately 55 to 70 ft bgs, a distinct color change was observed from gray to brown in borings located throughout the Site. This was interpreted as a transition between the barrier island deposits and the glacial outwash deposits. The transitional zone is approximately 35 to 40 feet thick. Also, a silty sand layer was observed between 65 and 95 ft bgs in this transitional layer.

Glacial Deposits

Underneath the transitional zone, glacial deposits consisting of primarily well-sorted brown outwash sands were encountered. The glacial deposits were encountered at approximately 95 to 105 ft bgs. Some silty sand lenses were observed in the borings at approximately 100 ft bgs in some of the borings.

1.5 Hydrogeology

There is one shallow, unconfined aquifer beneath the Site. Wells were installed at consistent, yet arbitrary, depth intervals in order to evaluate different groundwater zones of the aquifer during the RI. The zones selected are identified as follows: shallow “S” (wells screened at the water table ranging from 2 to 17 feet ft bgs), intermediate “I” (wells screened from 17 to

45 ft bgs), deep "D" (wells screened from 45 to 90 ft bgs), and deep (2) "D2" (wells screened from 90 to 105 ft bgs). Groundwater depths were collected from all accessible monitoring wells at low and high tides based on the survey tidal mark and tide charts obtained from the National Oceanic and Atmospheric Administration. The water table was observed at approximately 8 ft bgs during monitoring events at the Site.

Three tidal studies have been conducted to confirm the groundwater flow at and adjacent to the Site. In general, groundwater at low tide on the eastern portion of the Site flows northeast towards Jamaica Bay, and shallow groundwater on the western portion of the Site flows northwest towards Jamaica Bay. At high tide, the shallow groundwater contour map depicts the presence of a groundwater divide (or trough) on the Site from the former location of PZ-06 on the southwest corner to the former location of MW-02 on the eastern edge of the Site. This trough is the result of high tidal levels within Jamaica Bay causing shallow groundwater to flow southerly toward the Site during high tide. However, this effect does not "over-ride" the dominant shallow discharge pattern toward Jamaica Bay across the entire Site, thus creating a localized trough. South of the trough, the shallow groundwater still flows north toward Jamaica Bay, even during high tide.

1.6 Historical Groundwater Monitoring Event Summary

Groundwater monitoring events were conducted at the Site in February 2009 and October 2014. The post-remedy baseline sampling was completed in Q4 2016, and annual sampling began in the Fourth Quarter of 2017 (Q4 2017).

2. Rockaway Park Site and Adjacent Off-Site Areas

2.1 Annual Groundwater Monitoring Event Summary

Event Dates: November 29 to December 6, 2021

Site Phase: Post Remedial Annual Groundwater Monitoring

Location: Rockaway Park Former MGP Site

2.2 Monitoring Program

2.2.1 Number of Wells

A total of 63 monitoring wells and recovery wells are located at or adjacent to the Site and included in the post-remedy annual gauging and sampling plan at the Site described in Section 4.3 of the SMP. Forty-eight of the 63 wells are included in the post-remedy annual sampling program. The monitoring well and recovery well locations are depicted in Figure 2. Five of the wells were abandoned during this monitoring period as described Section 2.3 and two wells were replaced as described in Section 2.4. Two of the monitoring wells, RPMW-02D and RPMW-02D2, were identified as destroyed during the October 2016 baseline groundwater sampling event. Monitoring wells RPMW-04S and RPMW-04I were inaccessible during the comprehensive groundwater gauging event.

2.2.2 Hydrological Data

Groundwater levels were measured at 52 monitoring wells and recovery wells on November 29, 2021, during low tide and 49 monitoring wells during high tide. Two wells, RPMW-4S and RPMW-4I, were not accessible for both the low and high tide measurements. Three wells, RPMW-02S, RW-01B and RW-01C were not accessible for the high tide measurements. Depth to groundwater and calculated groundwater elevations are provided in Table 1. Shallow, intermediate, deep, and deep (2) groundwater contours and elevations for the November to December 2021 sampling event are depicted in Figures 3 and 4. The groundwater flow direction in the shallow zone was generally to the northeast during low tide and northwest during high tide. The groundwater flow direction in the intermediate zone is generally to the northwest during low tide and high tide. The groundwater flow direction in the deep zone is to the northwest during low tide and during high tide. The 2021 groundwater flow direction in the deep (2) zone depicted on the figures is based on limited number of wells compared to the historic flow direction which incorporated a larger number of wells in this zone prior to the remediation. Since there has been a decommissioning of all but one deep (2) interval monitoring wells, a groundwater flow map cannot be generated.

The depth to water and water table elevation data for the shallow, intermediate, deep, and deep (2) portions of the aquifer are presented below in Tables 2a to 2d.

Table 2a. Shallow Groundwater Measurements

Well ID	Low Tide Depth to Water (feet)	Low Tide Water Elevation (feet above MSL)	High Tide Depth to Water (feet)	High Tide Water Elevation (feet above MSL)
RPMW-01S	6.07	0.8	5.35	1.52
RPMW-02S	9.53	0.51	not accessible	-
RPMW-03S	5.65	0.57	5.42	0.8
RPMW-04S	not accessible	-	not accessible	-
RPMW-11S	7.62	0.56	7.25	0.93
RPMW-17S	5.41	0.62	5.07	0.96
RPMW-19S	6.58	1.67	6.15	2.1
RPMW-26S	5.57	2.16	5.28	2.45
RW-05A	8.52	0.72	7.68	1.56
RW-06A	8.58	0.81	7.94	1.45
RW-13A	7.69	1.06	7.45	1.3

Table 2b. Intermediate Groundwater Measurements

Well ID	Low Tide Depth to Water (feet)	Low Tide Water Elevation (feet above MSL)	High Tide Depth to Water (feet)	High Tide Water Elevation (feet above MSL)
RPMW-01I	6.85	-0.16	4.78	1.91
RPMW-02I	10.43	-0.4	8.44	1.59
RPMW-03I	6.62	-0.21	4.74	1.67
RPMW-04I	not accessible	-	not accessible	-
RPMW-11I	8.58	-0.38	6.3	1.9
RPMW-17I	5.57	2.02	5.08	2.51
RW-03	10.39	-0.19	8.51	1.69
RW-04A	10.18	-0.2	8.29	1.69
RW-05B	8.75	0.68	7.73	1.7
RW-07A	9.06	0.99	8.73	1.32
RW-09	9.44	1.1	10.29	0.25
RW-10	9.74	0.99	9.39	1.34
RW-11	10.13	0.75	9.23	1.65
RW-12A	10.13	0.54	9.03	1.64
RW-12B	10.68	0.42	9.4	1.7
RW-14B	7.81	0.81	7.01	1.61
RW-16A	7.53	0.81	6.95	1.39

Well ID	Low Tide Depth to Water (feet)	Low Tide Water Elevation (feet above MSL)	High Tide Depth to Water (feet)	High Tide Water Elevation (feet above MSL)
RW-17A	7.07	0.83	6.39	1.51
RW-18A	9.24	-0.73	8.96	-0.45
RW-02A	9.72	-1.07	9.3	-0.65
RW-02B	9.89	-0.93	8.82	0.14
RW-01A	9.7	-1.15	8.82	-0.27
RW-19A	9.11	-0.62	9.17	-0.68
RW-20A	9.01	-0.62	8.89	-0.5

Table 2c. Deep Groundwater Measurements

Well ID	Low Tide Depth to Water (feet)	Low Tide Water Elevation (feet above MSL)	High Tide Depth to Water (feet)	High Tide Water Elevation (feet above MSL)
RPMW-03D	6.86	0.26	4.86	2.26
RPMW-11D	8.26	-0.14	5.91	2.21
RPMW-17D	5.77	1.8	5.23	2.34
RW-04B	10.0	-0.31	8.07	1.62
RW-05C	9.13	0.52	8.0	1.65
RW-06B	9.17	0.6	8.12	1.65
RW-07B	9.68	0.64	8.84	1.48
RW-08B	9.11	0.54	8.16	1.49
RW-15A	8.13	0.74	7.3	1.57
RW-18B	10.25	-1.72	8.18	0.35
RW-18C	10.47	-1.97	8.21	0.29
RW-02C	10.95	-2.16	8.98	-0.19
RW-01B	10.46	-1.82	not accessible	-
RW-01C	10.16	-1.54	not accessible	-
RW-19B	10.27	-1.74	8.04	0.49
RW-19C	10.66	-2.13	8.26	0.27
RW-20B	10.13	-1.78	7.83	0.52
RW-20C	10.33	-2.12	7.82	0.39

Table 2d. Deep (2) Groundwater Measurements

Well ID	Low Tide Depth to Water (feet)	Low Tide Water Elevation (feet above MSL)	High Tide Depth to Water (feet)	High Tide Water Elevation (feet above MSL)
RW-16B	7.37	1.87	7.15	2.09

2.2.3 NAPL Gauging

All of the existing wells in the groundwater monitoring network are gauged for the presence of NAPL during each groundwater monitoring event. The thickness measurements recorded during the baseline sampling event are shown in Table 3.

Table 3. DNAPL Gauging Measurements

Well ID	October 2019 DNAPL Thickness (feet)	November 2020 DNAPL Thickness (feet)	November 2021 DNAPL Thickness (feet)	Estimated Recovery Rate (feet/day)
RW-03	0.26	0.10	0.38	0.0008
RW-05B	6.41	5.00	5.91	0.003
RW-06A	6.63	4.40	5.53	0.003
RW-06B	1.38	2.70	1.31	0.0
RW-07A	1.08	1.26	1.35	0.0003
RW-07B	5.18	5.70	5.28	0.0
RW-15A	0.41	0.00	0.0	0.0
RW-16A	0.00	0.0	0.0	0.0
RW-16B	6.95	Stringers	6.17	0.017
RW-17A	0.60	0.70	0.87	0.0005

Historically, the recovery rates for DNAPL at recovery wells RW-06A and RW-16B and the recovery rates from former monitoring wells collected in 2003 and 2005 during previous recovery rate evaluations have been approximately 0.04 feet/day. Over the year period between November 2020 and November 2021, recovery rates measured in wells that accumulated DNAPL ranged between 0.003 and 0.017 feet/day.

2.2.4 Groundwater Analytical Sampling

The 2021 groundwater sampling event was performed from November 29 to December 6, 2021 and included all accessible wells on the annual sampling list. If monitoring wells with measurable NAPL thicknesses were identified during the sampling event, they were not to be sampled in accordance with the provisions of the SMP. A total of 44 monitoring wells and recovery wells were sampled during the annual event for the following analytes:

- Volatile organic compounds (VOCs) via Environmental Protection Agency (EPA) Method 8260
- Semi-volatile organic compounds (SVOCs) via EPA Method 8270
- Total Cyanide via EPA Method 9012B
- Free Cyanide via EPA Method 9016

2.2.5 Analytical Results

The discussion below focuses on the analytical results from the current sampling event compared to the baseline sampling event performed in October 2016. The laboratory

analytical results for the November 2021 sampling event are included in Table 4 and depicted in Figure 5.

VOCs

VOC detections above the New York State Technical and Operational Guidance Series (TOGS), 1.1.1 – Ambient Water Quality Standards and Guidance Values (AWQS) for Class GA groundwater were generally limited to benzene, toluene, ethylbenzene and xylene (BTEX). Exceptions include concentrations of isopropylbenzene in 20 samples exceeded the AWQS, ranging from 2.2 to 50 times the AWQS value. Total BTEX concentrations ranged from less than method detection limits (ND) in 14 of the 44 wells sampled, to 6,919 µg/L in RW-12B, 9% lower than the maximum concentration detected in the baseline event. Individual BTEX compound concentrations above the AWQS were identified in 26 of the 32 wells with detections. The detections in wells with exceedances of the AWQS are summarized in Table 4.

SVOCs

SVOC detections above the AWQS included both PAHs and other SVOCs. Total PAH concentrations ranged from ND in 17 of the 44 wells sampled to 8,639 µg/L in RW-05C, 21% higher than the maximum detection in the baseline sampling event. Additionally, concentrations of biphenyl (1,1-biphenyl), phenol, and pentachlorophenol exceeded the AWQS in six, six, and one of the 44 wells, respectively. Maximum concentrations of biphenyl(1,1-biphenyl) and phenol were approximately 19% higher and 97% lower, respectively, then the maximum concentrations in the baseline event. Pentachlorophenol was not detected during the baseline event. The detections in wells with concentrations above the AWQS are summarized in Table 4.

Cyanides

Total and free cyanide were analyzed in all 44 wells sampled during the groundwater monitoring event. Free cyanide was detected in 33 samples, the maximum concentration detected was approximately 40% lower than the maximum concentration determined in the 2016 baseline sampling event. Total cyanide was detected in 32 of 44 wells with 10 samples exceeding the AWQS. Maximum concentrations of total cyanide were approximately 7% higher than the maximum concentrations observed during the baseline event. The detections in wells with concentrations above the AWQS are summarized in Table 4.

2.3 Well Abandonment Summary

Aquifer Drilling and Testing Inc., a Cascade Company (ADT) of Mineola New York abandoned eleven monitoring wells, RPMW-08S, RPMW-08I, RPMW-08D, RPMW-08D2, RPMW-14S, RPMW-14I, RPMW-14D, RPMW-14D2, RW-13B, RW-15B, and RW-17B,

between December 7 and December 9, 2021. The wells were abandoned in accordance with the NYSDEC-approved Well Abandonment Work Plan prepared by GEI and dated April 5, 2021.

Prior to completing the abandonment, several of the wells were sampled at the request of the NYSDEC. On May 13, 2021, monitoring wells RPMW-08S, RPMW-08I, RPMW-08D, and RPMW-08D2 were sampled for VOCs via Environmental Protection Agency (EPA) Method 8260, and SVOCs via EPA method 8270. These wells are not included in the on-going groundwater monitoring program at the Site. The results of the sampling from the RPMW-08 well cluster were submitted to the NYSDEC on July 14, 2021. A copy of the submittal is included in Appendix A.

Monitoring and recovery wells RPMW-14S, RPMW-14I, RPMW-14D, RPMW-14D2, and RW-13B were sampled for the full list of analytes prior to the abandonment. The five wells were included in the on-going monitoring program and the results are included within Table 5 of this annual groundwater report.

All wells were abandoned in place and tremie grouted to the ground surface in accordance with NYSDEC SOP CP-43: Groundwater Monitoring Well Decommissioning Policy with the exception of monitoring well RPMW-14D2. The total depth of monitoring well RPMW-14D2 was 105 feet, but the well casing was obstructed at approximately 62 feet. Multiple attempts were made to clear the obstruction but were unsuccessful. Since there had not been any previous groundwater impacts or NAPL impacts at this location which could be a vertical migration concern, the NYSDEC approved the grouting of the upper 62 feet of the well to grade and monitoring of the well to determine if the grout flowed past the obstruction at 62 ft-bgs. No evidence of grout flowing past the obstruction was observed. Monitoring and recovery well decommissioning logs can be found in Appendix B.

2.4 Monitoring Well Installation Summary

Replacement monitoring wells, RPMW-14SR, and RPMW-14IR were installed at the Site on December 9-10, 2021. ADT installed the wells adjacent to their former locations in the southeastern portion of the Site. The wells were installed to replicate their previously depths. Soil samples were not collected from the new well locations. Soil cuttings and purge water from the well installation were placed in 55-gallon drums on-site. The purge water from the installation was bulked with the purge water from groundwater sampling. A total of three drums of soil and two drums of purge water were profiled for waste disposal at a National Grid approved disposal facility.

- RPMW-14SR was installed using a 4-inch diameter geoprobe and constructed with 2-inch-diameter PVC riser and a 0.010-inch slot 10-foot-long screen, from 7.66 to 17.66 ft-bgs, with Number 2 US Silica filter sand pack backfilled to

approximately 2 feet above the screen. Bentonite chips were placed to 2 feet above the sand followed by grout up to 1 foot below the surface. A two-foot sump was affixed to the bottom of the screened interval from 17.66 to 19.66 ft-bgs.

- RPMW-14IR was installed using a hollow stem auger and constructed with 2-inch-diameter PVC riser and a 0.010-inch slot 10-foot-long screen, from 35.89 to 45.89 ft-bgs, with Number 2 US Silica filter sand pack backfilled to approximately 2 feet above the screen. Bentonite chips were placed to 2 feet above the sand followed by grout up to 1 foot below the surface. A two-foot sump was affixed to the bottom of the screened interval from 45.89-47.89 ft-bgs.

A 1-foot by 1-foot concrete well pad and steel stickup standpipes was installed at each well location. Table 5 describes the well construction details for the newly installed wells. The two monitoring wells will be surveyed in 2022 prior to the next groundwater sampling event. The replacement well construction logs can be found in Appendix C.

Table 5 – Replacement Monitoring Well Construction Summary

Monitoring Well ID	Well Diameter/ Type	Screened Interval (ft-bgs)	Sump Interval (ft-bgs)	Total Depth (ft bgs)	Top of Casing Elevation	Location
RPMW-14SR	2-inch PVC	7.66-17.66	17.66-19.66	19.66	NM	On-Site
RPMW-14IR	2-inch PVC	35.89-45.89	45.89-47.89	47.89	NM	On-Site

2.5 Future Plans

Continue annual post-remedy sampling in Q4 2022 as proposed in the draft SMP.

Submit future groundwater data in the Periodic Review Report following approval of the SMP.

Tables

Table 1. Water Level Measurements and Calculated Groundwater Elevations
Groundwater Monitoring Report Q4-2021
Rockaway Park Former MGP Site
Rockaway Park, New York

Monitoring Well ID	Well Diameter/Type	Screened Interval (feet below ground surface)	Total Depth (feet below ground surface)	Top of Casing Elevation (feet NAVD88)	Location	Low Tide				High Tide			
						Depth To Water	Groundwater Elevation (feet NAVD88)	Time of Water Measurement	DNAPL Thickness (feet)	Depth To Water	Groundwater Elevation (feet NAVD88)	Time of Water Measurement	DNAPL Thickness (feet)
RPMW-01S	2-inch PVC	5-15	17	6.87	Beach Channel Drive	6.07	0.8	621	0	5.35	1.52	1240	0
RPMW-01I	2-inch PVC	35-45	47	6.69	Beach Channel Drive	6.85	-0.16	621	0	4.78	1.91	1241	0
RPMW-02S	2-inch PVC	5-15	17	10.04	Beach Channel Drive	9.53	0.51	646	0	not accessible	-	-	0
RPMW-02I	2-inch PVC	35-45	47	10.03	Beach Channel Drive	10.43	-0.4	647	0	8.44	1.59	1253	0
RPMW-02D	2-inch PVC	64-74	76	10.01	Beach Channel Drive	Destroyed/CNL	-	-	-	Destroyed/CNL	-	-	-
RPMW-02D2	2-inch PVC	95-105	107	10.07	Beach Channel Drive	Destroyed/CNL	-	-	-	Destroyed/CNL	-	-	-
RPMW-03S	2-inch PVC	5-15	17	6.22	Beach Channel Drive	5.65	0.57	700	0	5.42	0.8	1306	0
RPMW-03I	2-inch PVC	35-45	47	6.41	Beach Channel Drive	6.62	-0.21	701	0	4.74	1.67	1305	0
RPMW-03D	2-inch PVC	65-75	77	7.12	Beach Channel Drive	6.86	0.26	700	0	4.86	2.26	1304	0
RPMW-04S	2-inch PVC	5-15	17	11.48	Substation	not accessible	-	-	-	not accessible	-	-	-
RPMW-04I	2-inch PVC	35-45	47	10.7	Substation	not accessible	-	-	-	not accessible	-	-	-
RPMW-11S	2-inch PVC	5-15	17	8.18	Beach Channel Drive	7.62	0.56	625	0	7.25	0.93	1242	0
RPMW-11I	2-inch PVC	35-45	47	8.2	Beach Channel Drive	8.58	-0.38	627	0	6.3	1.9	1242	0
RPMW-11D	2-inch PVC	65-75	77	8.12	Beach Channel Drive	8.26	-0.14	625	0	5.91	2.21	1243	0
RPMW-14S	2-inch PVC	5-15	17	12.37	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RPMW-14I	2-inch PVC	35-45	47	11.7	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RPMW-14D	2-inch PVC	66-76	78	13.02	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RPMW-14D2	2-inch PVC	95-105	107	11.61	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RPMW-17S	2-inch PVC	5-15	17	6.03	Beach 108th Street	5.41	0.62	710	0	5.07	0.96	1315	0
RPMW-17I	2-inch PVC	35-45	47	7.59	Beach 108th Street	5.57	2.02	711	0	5.08	2.51	1313	0
RPMW-17D	2-inch PVC	65-75	77	7.57	Beach 108th Street	5.77	1.8	710	0	5.23	2.34	1314	0
RPMW-19S	1-inch PVC	2.3-12.3	12.3	8.25	Beach Channel Drive	6.58	1.67	708	0	6.15	2.1	1309	0
RPMW-26S	1-inch PVC	3-13	13	7.73	Beach 108th Street	5.57	2.16	713	0	5.28	2.45	1316	0
RW-03	4-inch PVC	15-25	30	10.2	On-Site	10.39	-0.19	727	0.38	8.51	1.69	1243	0.38
RW-04A	4-inch PVC	30-40	45	9.98	On-Site	10.18	-0.2	728	0	8.29	1.69	1245	0
RW-04B	4-inch PVC	40-60	65	9.69	On-Site	10.0	-0.31	728	0	8.07	1.62	1246	0
RW-05A	4-inch PVC	10-20	25	9.24	On-Site	8.52	0.72	723	0	7.68	1.56	1239	0
RW-05B	4-inch PVC	25-40	45	9.43	On-Site	8.75	0.68	724	5.91	7.73	1.7	1240	5.91
RW-05C	4-inch PVC	40-50	55	9.65	On-Site	9.13	0.52	723	0	8.0	1.65	1238	0
RW-06A	4-inch PVC	10-20	25	9.39	On-Site	8.58	0.81	726	5.53	7.94	1.45	1242	5.53
RW-06B	4-inch PVC	50-60	65	9.77	On-Site	9.17	0.6	726	1.31	8.12	1.65	1241	1.31
RW-07A	4-inch PVC	10-30	35	10.05	On-Site	9.06	0.99	726	1.35	8.73	1.32	1247	1.35
RW-07B	4-inch PVC	40-60	65	10.32	On-Site	9.68	0.64	725	5.28	8.84	1.48	1248	5.28
RW-08B	4-inch PVC	40-60	65	9.65	On-Site	9.11	0.54	729	0	8.16	1.49	1249	0
RW-09	4-inch PVC	5-30	35	10.54	On-Site	9.44	1.1	731	0	10.29	0.25	1252	0
RW-10	4-inch PVC	5-30	35	10.73	On-Site	9.74	0.99	731	0	9.39	1.34	1253	0
RW-11	4-inch PVC	20-40	45	10.88	On-Site	10.13	0.75	732	0	9.23	1.65	1255	0
RW-12A	4-inch PVC	20-35	40	10.67	On-Site	10.13	0.54	733	0	9.03	1.64	1256	0
RW-12B	4-inch PVC	35-50	55	11.1	On-Site	10.68	0.42	733	0	9.4	1.7	1256	0
RW-13A	4-inch PVC	5-20	25	8.75	On-Site	7.69	1.06	722	0	7.45	1.3	1316	0
RW-13B	4-inch PVC	55-60	65	9.04	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RW-14B	4-inch PVC	10-30	35	8.62	On-Site	7.81	0.81	718	0	7.01	1.61	1314	0
RW-15A	4-inch PVC	40-60	65	8.87	On-Site	8.13	0.74	718	0	7.3	1.57	1313	0
RW-15B	4-inch PVC	80-100	105	8.69	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RW-16A	4-inch PVC	10-30	35	8.34	On-Site	7.53	0.81	720	0	6.95	1.39	1312	0
RW-16B	4-inch PVC	90-110	115	9.24	On-Site	7.37	1.87	720	6.17	7.15	2.09	1310	6.17
RW-17A	4-inch PVC	10-30	35	7.9	On-Site	7.07	0.83	716	0.87	6.39	1.51	1309	0.87
RW-17B	4-inch PVC	70-90	95	8.76	On-Site	Abandoned	-	-	-	Abandoned	-	-	-
RW-18A	4-inch PVC	22-32	37	8.51	Beach Channel Drive	9.24	-0.73	656	0	8.96	-0.45	1300	0
RW-18B	4-inch PVC	42-52	57	8.53	Beach Channel Drive	10.25	-1.72	656	0	8.18	0.35	1300	0
RW-18C	4-inch PVC	62-72	77	8.5	Beach Channel Drive	10.47	-1.97	656	0	8.21	0.29	1301	0
RW-02A	4-inch PVC	15-25	30	8.65	Beach Channel Drive	9.72	-1.07	650	0	9.3	-0.65	1255	0
RW-02B	4-inch PVC	35-45	50	8.96	Beach Channel Drive	9.89	-0.93	650	0	8.82	0.14	1255	0
RW-02C	4-inch PVC	60-70	75	8.79	Beach Channel Drive	10.95	-2.16	650	0	8.98	-0.19	1256	0
RW-01A	4-inch PVC	22-32	37	8.55	Beach Channel Drive	9.7	-1.15	648	0	8.82	-0.27	1251	0
RW-01B	4-inch PVC	41-51	56	8.64	Beach Channel Drive	10.46	-1.82	643	0	not accessible	-	-	-
RW-01C	4-inch PVC	61-71	76	8.62	Beach Channel Drive	10.16	-1.54	643	0	not accessible	-	-	-
RW-19A	4-inch PVC	19-29	34	8.49	Beach Channel Drive	9.11	-0.62	634	0	9.17	-0.68	1249	0
RW-19B	4-inch PVC	41-51	56	8.53	Beach Channel Drive	10.27	-1.74	633	0	8.04	0.49	1240	0
RW-19C	4-inch PVC	61-71	76	8.53	Beach Channel Drive	10.66	-2.13	636	0	8.26	0.27	1247	0
RW-20A	4-inch PVC	22-32	37	8.39	Beach Channel Drive	9.01	-0.62	636	0	8.89	-0.5	1247	0

Table 1. Water Level Measurements and Calculated Groundwater Elevations
Groundwater Monitoring Report Q4-2021
Rockaway Park Former MGP Site
Rockaway Park, New York

RW-20B	4-inch PVC	41-51	56	8.35	Beach Channel Drive	**10.13**	**-1.78**	**636**	**0**	**7.83**	**0.52**	**1246**	**0**
RW-20C	4-inch PVC	61-71	76	8.21	Beach Channel Drive	**10.33**	**-2.12**	**634**	**0**	**7.82**	**0.39**	**1245**	**0**

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
Sample Name				RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
Sample Date				11/30/2021	11/30/2021	12/1/2021	12/1/2021	11/30/2021	11/30/2021	12/2/2021	12/3/2021	12/3/2021	5/13/2021	5/13/2021	5/13/2021
Parent Sample															
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
BTEX	ug/L														
Benzene		71-43-2	1	1 U	**0.81 J**	1 U	**37**	**58**	**15**	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	**0.81 J**	1 U	**4.6**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	1 U	**75**	1 U	**320**	**0.44 J**	**3**	1 U	1 U	**13**	1 U	**0.41 J**	1 U
o-Xylene		95-47-6	5	1 U	**5.9**	1 U	**56**	1 U	1 U	1 U	1 U	**4.8**	1 U	**1.3**	1 U
m/p-Xylene		179601-23-1	5	1 U	**1.9**	1 U	**61**	**1.2**	1 U	1 U	1 U	**2**	1 U	1 U	1 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	**84.42**	ND	**478.6**	**59.64**	**18**	ND	ND	**19.8**	ND	**1.71**	ND
Other VOCs	ug/L														
Acetone		67-64-1	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromochloromethane		74-97-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane		75-27-4	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform		75-25-2	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane		74-83-9	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide		75-15-0	60*	1 U	1 U	1 U	**0.96 J**	**1.4**	**0.94 J**	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride		56-23-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene		108-90-7	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane		75-00-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform (Trichloromethane)		67-66-3	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane		74-87-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		110-82-7	NE	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
Dibromochloromethane		124-48-1	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)		106-93-4	0.0006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane		75-34-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane		107-06-2	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene		75-35-4	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene		156-59-2	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene		156-60-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane		78-87-5	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		10061-01-5	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene		10061-02-6	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane		123-91-1	NE	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Hexanone		591-78-6	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ
Isopropylbenzene		98-82-8	5	1 U	**14**	1 U	**23**	**21**	**2.4**	1 U	1 U	**19**	1 U	**0.75 J**	1 U
Methyl acetate		79-20-9	NE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	1 U	**1.9**	1 U	**1.7**	1 U	**0.98 J**	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
Sample Name				RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
Sample Date				11/30/2021	11/30/2021	12/1/2021	12/1/2021	11/30/2021	11/30/2021	12/2/2021	12/3/2021	12/3/2021	5/13/2021	5/13/2021	5/13/2021
Parent Sample															
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane		108-87-2	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride		75-09-2	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene		100-42-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane		79-34-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)		127-18-4	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene		87-61-6	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ
1,2,4-Trichlorobenzene		120-82-1	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane (TCA)		71-55-6	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane		79-00-5	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (TCE)		79-01-6	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)		75-69-4	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride		75-01-4	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total VOCs (ND=0)		TVOC_ND0	NE	ND	**100.32**	ND	**504.86**	**82.04**	**22.32**	ND	ND	**38.8**	ND	**2.46**	ND
PAH17	ug/L														
Acenaphthene		83-32-9	20*	10 U	**11**	**7.3 J**	**24**	**40**	**31**	10 UJ	10 U	10 U	10 U	**13**	10 U
Acenaphthylene		208-96-8	NE	10 U	**0.98 J**	10 U	**3.2 J**	10 U	10 U	10 U	10 U	10 U	10 U	**61**	10 U
Anthracene		120-12-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**1.3 J**	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	10 U	10 U	**1.3 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	10 U	10 U	10 U	**0.93 J**	10 U	10 U	10 U	10 U	10 U	10 U	**2.9 J**	10 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	**0.62 J**	**3 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	2 U	**5.6**	2 U	**390**	**1.3 J**	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	50*	10 U	10 U	10 U	**1.5 J**	10 U	10 U	10 U	10 U	10 U	10 U	**8.7 J**	10 U
Pyrene		129-00-0	50*	10 U	10 U	10 U	**2.7 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	**17.58**	**9.22**	**425.33**	**41.3**	**31**	ND	ND	ND	ND	**86.9**	ND
PAH17 Other SVOCs	ug/L														
Acetophenone		98-86-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Atrazine		1912-24-9	7.5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde		100-52-7	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ
Biphenyl (1,1-Biphenyl)		92-52-4	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**3.6 J**	10 U
Bis(2-chloroethoxy)methane		111-91-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether		111-44-4	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
Sample Name				RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
Sample Date				11/30/2021	11/30/2021	12/1/2021	12/1/2021	11/30/2021	11/30/2021	12/2/2021	12/3/2021	12/3/2021	5/13/2021	5/13/2021	5/13/2021
Parent Sample															
Analyte	Units	CAS No.	NYS AWQS												
2,2-oxybis(1-Chloropropane)		108-60-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate		117-81-7	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U
4-Bromophenyl phenyl ether		101-55-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate		85-68-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Caprolactam		105-60-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Carbazole		86-74-8	NE	10 U	10 U	10 U	**3.6 J**	10 U	10 U	10 U	10 U	10 U	10 U	**1.3 J**	10 U
4-Chloro-3-methylphenol		59-50-7	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline		106-47-8	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene		91-58-7	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol		95-57-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether		7005-72-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran		132-64-9	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**1.8 J**	10 U
3,3-Dichlorobenzidine		91-94-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol		120-83-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate		84-66-2	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate		131-11-3	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol		105-67-9	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate		84-74-2	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol		534-52-1	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		51-28-5	10*	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene		121-14-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,6-Dinitrotoluene		606-20-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octyl phthalate		117-84-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene		118-74-1	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene		77-47-4	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane		67-72-1	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Isophorone		78-59-1	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	**0.62 J**	**3 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol (o-Cresol)		95-48-7	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol (p-Cresol)		106-44-5	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline		88-74-4	5	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline		99-09-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline		100-01-6	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene		98-95-3	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Nitrophenol		88-75-5	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol		100-02-7	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Pentachlorophenol		87-86-5	1	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Phenol		108-95-2	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
			Sample Name	RPMW-01S	RPMW-01I	RPMW-02S	RPMW-02I	RPMW-03S	RPMW-03I	RPMW-03D	RPMW-04S	RPMW-04I	RPMW-08S	RPMW-08I	RPMW-08D
			Sample Date	11/30/2021	11/30/2021	12/1/2021	12/1/2021	11/30/2021	11/30/2021	12/2/2021	12/3/2021	12/3/2021	5/13/2021	5/13/2021	5/13/2021
			Parent Sample												
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
1,2,4,5-Tetrachlorobenzene		95-94-3	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol		95-95-4	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol		88-06-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total SVOCs (ND=0)		TSVOC_ND0	NE	ND	**17.58**	**9.22**	**428.93**	**41.3**	**31**	ND	ND	ND	ND	**93.6**	ND
Cyanides	ug/L														
Free Cyanide		FREECN	NE	**2.9 J**	**1.9 J**	**4 J**	**1.7 J**	**2.1 J**	**2.3 J**	**3.9 J**	**2.5 J**	**2.1 J**			
Total Cyanide		57-12-5	200	**456 J**	**52 J**	**334 J**	**4.9 J**	**46.9 J**	**15.5 J**	10 R	**150 J**	**14.6 J**			

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Analyte	Units	CAS No.	NYS AWQS	Location Name / Sample Name / Sample Date / Parent Sample											
				RPMW-08D2 RPMW-08D2 5/13/2021	RPMW-11S RPMW-11S 11/30/2021	RPMW-11I RPMW-11I 11/30/2021	RPMW-11D RPMW-11D 11/30/2021	RPMW-14S RPMW-14S 12/2/2021	RPMW-14I RPMW-14I 11/29/2021	RPMW-14D RPMW-14D 12/3/2021	RPMW-14D2 RPMW-14D2 12/3/2021	RPMW-17S RPMW-17S 12/6/2021	RPMW-17I RPMW-17I 12/6/2021	RPMW-17I DUP-03 12/6/2021 RPMW-17I	RPMW-17D RPMW-17D 12/6/2021
BTEX	ug/L														
Benzene		71-43-2	1	1 U	**0.39 J**	**860**	1 U	**280**	1 U	1 U	1 U	**110**	**1.3**	**1.4**	**0.23 J**
Toluene		108-88-3	5	**0.4 J**	1 U	**9.9**	1 U	**14**	1 U	1 U	1 U	**12**	**5.6**	**5.5**	**0.44 J**
Ethylbenzene		100-41-4	5	1 U	1 U	**970**	1 U	**1300**	1 U	1 U	1 U	**18**	**72**	**72**	**1.4**
o-Xylene		95-47-6	5	1 U	1 U	**160**	1 U	**290**	1 U	1 U	1 U	**290**	**69**	**69**	1 U
m/p-Xylene		179601-23-1	5	1 U	1 U	**53**	1 U	**420**	1 U	1 U	1 U	**6.4**	**22**	**22**	**0.31 J**
Total BTEX (ND=0)		TBTEX_ND0	NE	**0.4**	**0.39**	**2052.9**	ND	**2304**	ND	ND	ND	**436.4**	**169.9**	**169.9**	**2.38**
Other VOCs	ug/L														
Acetone		67-64-1	50*	**38 J**	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromochloromethane		74-97-5	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane		75-27-4	50*	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform		75-25-2	50*	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane		74-83-9	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon disulfide		75-15-0	60*	**1**	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride		56-23-5	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene		108-90-7	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane		75-00-3	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform (Trichloromethane)		67-66-3	7	**1.2**	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane		74-87-3	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
Cyclohexane		110-82-7	NE	1 U	1 U	5 U	1 U	**2 J**	1 U	1 U	1 U	**10**	**6.2**	**6.2**	1 U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	1 UJ	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane		124-48-1	50*	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)		106-93-4	0.0006	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	**0.42 J**	1 U	1 U	1 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ
1,1-Dichloroethane		75-34-3	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane		107-06-2	0.6	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene		75-35-4	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene		156-59-2	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene		156-60-5	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane		78-87-5	1	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		10061-01-5	0.4	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene		10061-02-6	0.4	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane		123-91-1	NE	50 U	50 U	250 U	50 U	250 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Hexanone		591-78-6	50*	5 UJ	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene		98-82-8	5	1 U	**0.42 J**	**33**	1 U	**110**	1 U	1 U	1 U	**250**	**220**	**230**	1 U
Methyl acetate		79-20-9	NE	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	**4.2 J**	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	**0.65 J**	1 U	**6.2**	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RPMW-08D2	RPMW-11S	RPMW-11I	RPMW-11D	RPMW-14S	RPMW-14I	RPMW-14D	RPMW-14D2	RPMW-17S	RPMW-17I	RPMW-17I	RPMW-17D
Sample Name				RPMW-08D2	RPMW-11S	RPMW-11I	RPMW-11D	RPMW-14S	RPMW-14I	RPMW-14D	RPMW-14D2	RPMW-17S	RPMW-17I	DUP-03	RPMW-17D
Sample Date				5/13/2021	11/30/2021	11/30/2021	11/30/2021	12/2/2021	11/29/2021	12/3/2021	12/3/2021	12/6/2021	12/6/2021	12/6/2021	12/6/2021
Parent Sample														RPMW-17I	
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	5 U	5 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylcyclohexane		108-87-2	NE	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	**10**	**9.7**	**9.9**	1 U
Methylene chloride		75-09-2	5	**0.92 J**	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene		100-42-5	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane		79-34-5	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)		127-18-4	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene		87-61-6	5	1 UJ	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene		120-82-1	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane (TCA)		71-55-6	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane		79-00-5	1	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (TCE)		79-01-6	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)		75-69-4	5	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride		75-01-4	2	**0.59 J**	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total VOCs (ND=0)		TVOC_ND0	NE	**46.96**	**0.81**	**2092.1**	ND	**2416**	ND	ND	ND	**706.82**	**405.8**	**416**	**2.38**
PAH17	ug/L														
Acenaphthene		83-32-9	20*	10 U	10 U	**56**	10 U	**12**	10 U	10 U	10 U	**4.6 J**	**1.7 J**	**1.8 J**	10 U
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**0.97 J**	10 U	10 U	10 U
Anthracene		120-12-7	50*	10 U	10 U	**2.2 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	10 U	10 U	**0.92 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	10 U	10 U	**8.4 J**	10 U	**3.2 J**	10 U	10 U	10 U	**1.7 J**	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	**0.68 J**	10 U	**83**	10 U	**1.6 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	**1.9 J**	2 U	**3200**	2 U	**20**	2 U	2 U	2 U	**14**	**2.3**	**2.5**	2 U
Phenanthrene		85-01-8	50*	10 U	10 U	**11**	10 U	**1.4 J**	10 U	10 U	10 U	**1.4 J**	10 U	10 U	10 U
Pyrene		129-00-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	**2.58**	ND	**3361.52**	ND	**38.2**	ND	ND	ND	**22.67**	**4**	**4.3**	ND
PAH17 Other SVOCs	ug/L														
Acetophenone		98-86-2	NE	10 U	10 U	10 U	10 U	**9.1 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Atrazine		1912-24-9	7.5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde		100-52-7	NE	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Biphenyl (1,1-Biphenyl)		92-52-4	5	10 U	10 U	**14**	10 U	10 U	10 U	10 U	10 U	**2.1 J**	10 U	10 U	10 U
Bis(2-chloroethoxy)methane		111-91-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether		111-44-4	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RPMW-08D2	RPMW-11S	RPMW-11I	RPMW-11D	RPMW-14S	RPMW-14I	RPMW-14D	RPMW-14D2	RPMW-17S	RPMW-17I	RPMW-17I	RPMW-17D
Sample Name				RPMW-08D2	RPMW-11S	RPMW-11I	RPMW-11D	RPMW-14S	RPMW-14I	RPMW-14D	RPMW-14D2	RPMW-17S	RPMW-17I	DUP-03	RPMW-17D
Sample Date				5/13/2021	11/30/2021	11/30/2021	11/30/2021	12/2/2021	11/29/2021	12/3/2021	12/3/2021	12/6/2021	12/6/2021	12/6/2021	12/6/2021
Parent Sample														RPMW-17I	
Analyte	Units	CAS No.	NYS AWQS												
2,2-oxybis(1-Chloropropane)		108-60-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate		117-81-7	5	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
4-Bromophenyl phenyl ether		101-55-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate		85-68-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Caprolactam		105-60-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole		86-74-8	NE	10 U	10 U	**6.2 J**	10 U	**0.98 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol		59-50-7	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline		106-47-8	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene		91-58-7	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol		95-57-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether		7005-72-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran		132-64-9	NE	10 U	10 U	**2.6 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3-Dichlorobenzidine		91-94-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ
2,4-Dichlorophenol		120-83-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate		84-66-2	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate		131-11-3	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol		105-67-9	50*	10 U	10 U	10 U	10 U	**6.4 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate		84-74-2	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol		534-52-1	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		51-28-5	10*	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene		121-14-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,6-Dinitrotoluene		606-20-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octyl phthalate		117-84-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene		118-74-1	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene		77-47-4	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane		67-72-1	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Isophorone		78-59-1	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene		91-57-6	NE	**0.68 J**	10 U	**83**	10 U	**1.6 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol (o-Cresol)		95-48-7	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol (p-Cresol)		106-44-5	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline		88-74-4	5	10 U	10 UJ	10 UJ	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline		99-09-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline		100-01-6	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene		98-95-3	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Nitrophenol		88-75-5	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol		100-02-7	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Pentachlorophenol		87-86-5	1	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Phenol		108-95-2	1	**1.6 J**	10 U	10 U	10 U	**7.4 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RPMW-08D2	RPMW-11S	RPMW-11I	RPMW-11D	RPMW-14S	RPMW-14I	RPMW-14D	RPMW-14D2	RPMW-17S	RPMW-17I	RPMW-17I	RPMW-17D
Sample Name				RPMW-08D2	RPMW-11S	RPMW-11I	RPMW-11D	RPMW-14S	RPMW-14I	RPMW-14D	RPMW-14D2	RPMW-17S	RPMW-17I	DUP-03	RPMW-17D
Sample Date				5/13/2021	11/30/2021	11/30/2021	11/30/2021	12/2/2021	11/29/2021	12/3/2021	12/3/2021	12/6/2021	12/6/2021	12/6/2021	12/6/2021
Parent Sample														RPMW-17I	
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
1,2,4,5-Tetrachlorobenzene		95-94-3	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol		95-95-4	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol		88-06-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total SVOCs (ND=0)		TSVOC_ND0	NE	**4.18**	ND	**3384.32**	ND	**62.08**	ND	ND	ND	**24.77**	**4**	**4.3**	ND
Cyanides	ug/L														
Free Cyanide		FREECN	NE		5 U	5 U	**1.9 J**	**2.5 J**	5 U	**2.7 J**	**2.5 J**	**2.5 J**	**2.5 J**	**2.9 J**	5 U
Total Cyanide		57-12-5	200		**196 J**	**46.3 J**	**8.4 J**	**80.8 J**	10 U	10 R	10 R	**26.3 J**	**43.3 J**	**35.9 J**	10 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Analyte	Units	CAS No.	NYS AWQS	Location Name / Sample Name / Sample Date / Parent Sample											
				RPMW-19S RPMW-19S 12/2/2021	RPMW-26S RPMW-26S 12/6/2021	RW-01A RW-01A 12/1/2021	RW-01B RW-01B 12/1/2021	RW-01C RW-01C 12/1/2021	RW-02A RW-02A 12/1/2021	RW-02B RW-02B 12/1/2021	RW-02C RW-02C 12/1/2021	RW-04A RW-04A 12/6/2021	RW-04B RW-04B 12/2/2021	RW-05A RW-05A 11/29/2021	RW-05C RW-05C 11/29/2021
BTEX	ug/L														
Benzene		71-43-2	1	**270**	1 U	**2.7**	**120**	1 U	**3.7**	1 U	1 U	**2300**	**270**	**12**	**2300**
Toluene		108-88-3	5	**0.92 J**	1 U	1 U	**2.9**	**0.5 J**	**0.49 J**	1 U	1 U	**27**	**8.2**	1 U	**13**
Ethylbenzene		100-41-4	5	**1.3**	1 U	**1.3**	**89**	1 U	**0.34 J**	1 U	1 U	**2400**	**670**	**2**	**2900**
o-Xylene		95-47-6	5	**5.9**	1 U	1 U	**9.2**	1 U	**0.36 J**	1 U	1 U	**620**	**200**	**1.3**	**540**
m/p-Xylene		179601-23-1	5	**5.7**	1 U	**0.32 J**	**2.7**	1 U	**0.43 J**	1 U	1 U	**130**	**32**	**0.65 J**	**120**
Total BTEX (ND=0)		TBTEX_ND0	NE	**283.82**	ND	**4.32**	**223.8**	**0.5**	**5.32**	ND	ND	**5477**	**1180.2**	**15.95**	**5873**
Other VOCs	ug/L														
Acetone		67-64-1	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	10 U	5 U	50 U
Bromochloromethane		74-97-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Bromodichloromethane		75-27-4	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Bromoform		75-25-2	50*	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	10 U	2 U	1 U	10 U
Bromomethane		74-83-9	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Carbon disulfide		75-15-0	60*	1 U	1 U	1 U	**4.6**	1 U	**1.8**	**2.1**	1 U	10 U	2 U	1 U	10 U
Carbon tetrachloride		56-23-5	5	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	10 U	2 U	1 U	10 U
Chlorobenzene		108-90-7	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Chloroethane		75-00-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Chloroform (Trichloromethane)		67-66-3	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Chloromethane		74-87-3	5	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	2 U	1 U	10 U
Cyclohexane		110-82-7	NE	**0.93 J**	1 U	1 U	**0.41 J**	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Dibromochloromethane		124-48-1	50*	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	10 U	2 U	1 U	10 U
1,2-Dibromoethane (EDB)		106-93-4	0.0006	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	10 UJ	2 U	1 U	10 U
1,1-Dichloroethane		75-34-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,2-Dichloroethane		107-06-2	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,1-Dichloroethene		75-35-4	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
cis-1,2-Dichloroethene		156-59-2	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
trans-1,2-Dichloroethene		156-60-5	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,2-Dichloropropane		78-87-5	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
cis-1,3-Dichloropropene		10061-01-5	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
trans-1,3-Dichloropropene		10061-02-6	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,4-Dioxane		123-91-1	NE	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	500 U	100 U	50 U	500 U
2-Hexanone		591-78-6	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	10 U	5 U	50 U
Isopropylbenzene		98-82-8	5	**70**	1 U	1 U	**30**	1 U	1 U	**0.57 J**	1 U	**65**	**13**	**11**	**61**
Methyl acetate		79-20-9	NE	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	10 U	5 U	50 U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	10 U	5 U	50 U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	**2.2**	1 U	1 U	**0.76 J**	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

				Location Name	RPMW-19S	RPMW-26S	RW-01A	RW-01B	RW-01C	RW-02A	RW-02B	RW-02C	RW-04A	RW-04B	RW-05A	RW-05C
				Sample Name	RPMW-19S	RPMW-26S	RW-01A	RW-01B	RW-01C	RW-02A	RW-02B	RW-02C	RW-04A	RW-04B	RW-05A	RW-05C
				Sample Date	12/2/2021	12/6/2021	12/1/2021	12/1/2021	12/1/2021	12/1/2021	12/1/2021	12/1/2021	12/6/2021	12/2/2021	11/29/2021	11/29/2021
				Parent Sample												
Analyte	**Units**	**CAS No.**	**NYS AWQS**													
4-Methyl-2-pentanone (MIBK)		108-10-1	NE		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	10 U	5 U	50 U
Methylcyclohexane		108-87-2	NE		**1.1**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Methylene chloride		75-09-2	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Styrene		100-42-5	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,1,2,2-Tetrachloroethane		79-34-5	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Tetrachloroethene (PCE)		127-18-4	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,2,3-Trichlorobenzene		87-61-6	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,2,4-Trichlorobenzene		120-82-1	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,1,1-Trichloroethane (TCA)		71-55-6	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
1,1,2-Trichloroethane		79-00-5	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Trichloroethene (TCE)		79-01-6	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Trichlorofluoromethane (Freon 11)		75-69-4	5		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Vinyl chloride		75-01-4	2		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	10 U
Total VOCs (ND=0)		TVOC_ND0	NE		**358.05**	ND	**4.32**	**259.57**	**0.5**	**7.12**	**2.67**	ND	**5542**	**1193.2**	**26.95**	**5934**
PAH17	ug/L															
Acenaphthene		83-32-9	20*		**87 J**	10 U	10 U	**12**	10 U	10 U	**12**	10 U	**110**	**27 J**	**290**	**130**
Acenaphthylene		208-96-8	NE		**1 J**	10 U	10 U	**3.2 J**	10 U	10 U	10 U	10 U	50 U	**42**	10 U	10 U
Anthracene		120-12-7	50*		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	**6.8 J**	**3.8 J**
Benzo(a)anthracene		56-55-3	0.002*		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	**0.78 J**	1 U
Benzo(b)fluoranthene		205-99-2	0.002*		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	**9.5 J**	10 U
Fluorene		86-73-7	50*		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**39 J**	**4.9 J**	**99**	**47**
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**280**	**1.4 J**	10 U	**630**
Naphthalene		91-20-3	10*		**8.4**	2 U	**1.2 J**	**16**	2 U	2 U	2 U	**0.87 J**	**5400**	**190**	**3.3**	**7800**
Phenanthrene		85-01-8	50*		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**30 J**	**6.8 J**	**110**	**28**
Pyrene		129-00-0	50*		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	**10**	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE		**96.4**	ND	**1.2**	**31.2**	ND	ND	**12**	**0.87**	**5859**	**272.1**	**529.38**	**8638.8**
PAH17 Other SVOCs	ug/L															
Acetophenone		98-86-2	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Atrazine		1912-24-9	7.5		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Benzaldehyde		100-52-7	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Biphenyl (1,1-Biphenyl)		92-52-4	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**29 J**	**5 J**	**26**	**47**
Bis(2-chloroethoxy)methane		111-91-1	5		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether		111-44-4	1		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Analyte	Units	CAS No.	NYS AWQS	Location Name / Sample Name / Sample Date / Parent Sample											
				RPMW-19S RPMW-19S 12/2/2021	RPMW-26S RPMW-26S 12/6/2021	RW-01A RW-01A 12/1/2021	RW-01B RW-01B 12/1/2021	RW-01C RW-01C 12/1/2021	RW-02A RW-02A 12/1/2021	RW-02B RW-02B 12/1/2021	RW-02C RW-02C 12/1/2021	RW-04A RW-04A 12/6/2021	RW-04B RW-04B 12/2/2021	RW-05A RW-05A 11/29/2021	RW-05C RW-05C 11/29/2021
2,2-oxybis(1-Chloropropane)		108-60-1	5	10 UJ	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 UJ	50 U	10 UJ	10 U	10 U
Bis(2-ethylhexyl)phthalate		117-81-7	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
4-Bromophenyl phenyl ether		101-55-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Butyl benzyl phthalate		85-68-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Caprolactam		105-60-2	NE	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 UJ	10 U	10 U
Carbazole		86-74-8	NE	**1.5 J**	10 U	10 U	**3.8 J**	10 U	10 U	10 U	10 U	**13 J**	**40**	**5 J**	**19**
4-Chloro-3-methylphenol		59-50-7	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4-Chloroaniline		106-47-8	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2-Chloronaphthalene		91-58-7	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2-Chlorophenol		95-57-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether		7005-72-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Dibenzofuran		132-64-9	NE	**1.8 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	**2 J**	**12**	**7.2 J**
3,3-Dichlorobenzidine		91-94-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2,4-Dichlorophenol		120-83-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Diethyl phthalate		84-66-2	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Dimethyl phthalate		131-11-3	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2,4-Dimethylphenol		105-67-9	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Di-n-butyl phthalate		84-74-2	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol		534-52-1	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	100 U	20 U	20 U	20 U
2,4-Dinitrophenol		51-28-5	10*	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	100 U	20 U	20 U	20 U
2,4-Dinitrotoluene		121-14-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
2,6-Dinitrotoluene		606-20-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Di-n-octyl phthalate		117-84-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Hexachlorobenzene		118-74-1	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 UJ	1 U	1 U
Hexachlorocyclopentadiene		77-47-4	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Hexachloroethane		67-72-1	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Isophorone		78-59-1	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**280**	**1.4 J**	10 U	**630**
2-Methylphenol (o-Cresol)		95-48-7	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4-Methylphenol (p-Cresol)		106-44-5	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2-Nitroaniline		88-74-4	5	10 UJ	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 UJ	50 U	10 UJ	10 UJ	10 UJ
3-Nitroaniline		99-09-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4-Nitroaniline		100-01-6	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Nitrobenzene		98-95-3	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
2-Nitrophenol		88-75-5	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4-Nitrophenol		100-02-7	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	100 U	20 U	20 U	20 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Pentachlorophenol		87-86-5	1	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	100 U	20 U	20 U	20 U
Phenol		108-95-2	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	**2.8 J**

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RPMW-19S	RPMW-26S	RW-01A	RW-01B	RW-01C	RW-02A	RW-02B	RW-02C	RW-04A	RW-04B	RW-05A	RW-05C
			Sample Name	RPMW-19S	RPMW-26S	RW-01A	RW-01B	RW-01C	RW-02A	RW-02B	RW-02C	RW-04A	RW-04B	RW-05A	RW-05C
			Sample Date	12/2/2021	12/6/2021	12/1/2021	12/1/2021	12/1/2021	12/1/2021	12/1/2021	12/1/2021	12/6/2021	12/2/2021	11/29/2021	11/29/2021
			Parent Sample												
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
1,2,4,5-Tetrachlorobenzene		95-94-3	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2,4,5-Trichlorophenol		95-95-4	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
2,4,6-Trichlorophenol		88-06-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
Total SVOCs (ND=0)		TSVOC_ND0	NE	**99.7**	ND	**1.2**	**35**	ND	ND	**12**	**0.87**	**5901**	**319.1**	**572.38**	**8714.8**
Cyanides	ug/L														
Free Cyanide		FREECN	NE	**2.5 J**	**2.3 J**	**2.3 J**	5 U	**22.1**	**4 J**	**3.1 J**	**2.3 J**	**3.3 J**	**2.7 J**	5 U	5 U
Total Cyanide		57-12-5	200	**137 J**	**8.9 J**	**1020 J**	10 UJ	10 UJ	**349 J**	**50.2 J**	10 UJ	**48.7 J**	**180 J**	**12.1 J**	**268 J**

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Analyte	Units	CAS No.	NYS AWQS	Location Name / Sample Name / Sample Date / Parent Sample											
				RW-12A RW-12A 11/29/2021	RW-12B RW-12B 11/29/2021	RW-13A RW-13A 11/29/2021	RW-13B RW-13B 11/29/2021	RW-13B DUP-01 11/29/2021 RW-13B	RW-18A RW-18A 12/6/2021	RW-18B RW-18B 12/1/2021	RW-18C RW-18C 12/1/2021	RW-19A RW-19A 12/1/2021	RW-19C RW-19C 12/2/2021	RW-20A RW-20A 12/1/2021	RW-20B RW-20B 12/1/2021
BTEX	ug/L														
Benzene		71-43-2	1	**74**	**110**	**480**	**0.26 J**	**0.32 J**	**42**	**5**	1 U	**5.1**	1 U	1 U	**360**
Toluene		108-88-3	5	**4.2 J**	**9 J**	**2.5**	1 U	1 U	**16**	1 U	1 U	**0.68 J**	1 U	1 U	**3.2**
Ethylbenzene		100-41-4	5	**3900**	**4300**	**170**	1 U	1 U	**7.2**	1 U	1 U	**0.74 J**	1 U	1 U	**330**
o-Xylene		95-47-6	5	**990**	**1200**	**25**	1 U	1 U	**14**	1 U	1 U	1 U	1 U	1 U	**26**
m/p-Xylene		179601-23-1	5	**320 J**	**1300**	**9**	1 U	1 U	**21**	**0.33 J**	1 U	**0.44 J**	1 U	1 U	**17**
Total BTEX (ND=0)		TBTEX_ND0	NE	**5288.2**	**6919**	**686.5**	**0.26**	**0.32**	**100.2**	**5.33**	ND	**6.96**	ND	ND	**736.2**
Other VOCs	ug/L														
Acetone		67-64-1	50*	50 U	50 U	10 U	5 U	5 U	**5.9**	5 U	5 U	5 U	5 U	5 U	10 U
Bromochloromethane		74-97-5	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Bromodichloromethane		75-27-4	50*	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Bromoform		75-25-2	50*	10 U	10 U	2 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	2 UJ
Bromomethane		74-83-9	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Carbon disulfide		75-15-0	60*	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U	2 U
Carbon tetrachloride		56-23-5	5	10 U	10 U	2 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	2 UJ
Chlorobenzene		108-90-7	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Chloroethane		75-00-3	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Chloroform (Trichloromethane)		67-66-3	7	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Chloromethane		74-87-3	5	10 U	10 U	2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 U
Cyclohexane		110-82-7	NE	10 U	10 U	**0.73 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Dibromochloromethane		124-48-1	50*	10 U	10 U	2 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	2 UJ
1,2-Dibromoethane (EDB)		106-93-4	0.0006	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	10 U	10 U	2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 U
1,1-Dichloroethane		75-34-3	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,2-Dichloroethane		107-06-2	0.6	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,1-Dichloroethene		75-35-4	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
cis-1,2-Dichloroethene		156-59-2	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
trans-1,2-Dichloroethene		156-60-5	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,2-Dichloropropane		78-87-5	1	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
cis-1,3-Dichloropropene		10061-01-5	0.4	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
trans-1,3-Dichloropropene		10061-02-6	0.4	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,4-Dioxane		123-91-1	NE	500 U	500 U	100 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	100 U
2-Hexanone		591-78-6	50*	50 U	50 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Isopropylbenzene		98-82-8	5	**55**	**78**	**24**	1 U	1 U	**0.64 J**	**1.2**	1 U	1 U	1 U	1 U	**42**
Methyl acetate		79-20-9	NE	50 U	50 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	50 U	50 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RW-12A	RW-12B	RW-13A	RW-13B	RW-13B	RW-18A	RW-18B	RW-18C	RW-19A	RW-19C	RW-20A	RW-20B
Sample Name				RW-12A	RW-12B	RW-13A	RW-13B	DUP-01	RW-18A	RW-18B	RW-18C	RW-19A	RW-19C	RW-20A	RW-20B
Sample Date				11/29/2021	11/29/2021	11/29/2021	11/29/2021	11/29/2021	12/6/2021	12/1/2021	12/1/2021	12/1/2021	12/2/2021	12/1/2021	12/1/2021
Parent Sample								RW-13B							
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	50 U	50 U	10 U	5 U	5 U	**10**	5 U	5 U	5 U	5 U	5 U	10 U
Methylcyclohexane		108-87-2	NE	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Methylene chloride		75-09-2	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Styrene		100-42-5	5	10 U	10 U	2 U	1 U	1 U	**2**	1 U	1 U	**0.82 J**	1 U	1 U	2 U
1,1,2,2-Tetrachloroethane		79-34-5	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Tetrachloroethene (PCE)		127-18-4	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,2,3-Trichlorobenzene		87-61-6	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,2,4-Trichlorobenzene		120-82-1	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,1,1-Trichloroethane (TCA)		71-55-6	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
1,1,2-Trichloroethane		79-00-5	1	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Trichloroethene (TCE)		79-01-6	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Trichlorofluoromethane (Freon 11)		75-69-4	5	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Vinyl chloride		75-01-4	2	10 U	10 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Total VOCs (ND=0)		TVOC_ND0	NE	**5343.2**	**6997**	**711.23**	**0.26**	**0.32**	**118.74**	**6.53**	ND	**8.88**	ND	ND	**778.2**
PAH17	ug/L														
Acenaphthene		83-32-9	20*	**160**	**170**	**64**	10 U	10 U	**2.5 J**	10 U	10 U	10 U	10 U	10 U	**63**
Acenaphthylene		208-96-8	NE	10 U	10 U	**1.5 J**	10 U	10 U	10 U	10 U	10 U	10 U	**1.5 J**	10 U	10 U
Anthracene		120-12-7	50*	**3.7 J**	**5.3 J**	**6.2 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**3.1 J**
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	10 U	**2 J**	**2.3 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	**40**	**39**	**29**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**18**
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	**730**	**780**	**20**	10 U	10 U	**0.53 J**	10 U	10 U	10 U	10 U	10 U	**41**
Naphthalene		91-20-3	10*	**3100**	**6800**	**39**	**1.5 J**	**0.71 J**	**13**	2 U	2 U	2 U	2 U	2 U	**2100**
Phenanthrene		85-01-8	50*	**25**	**32**	**33**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**18**
Pyrene		129-00-0	50*	10 U	**2.1 J**	**2.5 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	**4058.7**	**7830.4**	**197.5**	**1.5**	**0.71**	**16.03**	ND	ND	ND	**1.5**	ND	**2243.1**
PAH17 Other SVOCs	ug/L														
Acetophenone		98-86-2	NE	**5.3 J**	**4.8 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Atrazine		1912-24-9	7.5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde		100-52-7	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Biphenyl (1,1-Biphenyl)		92-52-4	5	**39**	**36**	**1.8 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**4.5 J**
Bis(2-chloroethoxy)methane		111-91-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether		111-44-4	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Location Name				RW-12A	RW-12B	RW-13A	RW-13B	RW-13B	RW-18A	RW-18B	RW-18C	RW-19A	RW-19C	RW-20A	RW-20B
Sample Name				RW-12A	RW-12B	RW-13A	RW-13B	DUP-01	RW-18A	RW-18B	RW-18C	RW-19A	RW-19C	RW-20A	RW-20B
Sample Date				11/29/2021	11/29/2021	11/29/2021	11/29/2021	11/29/2021	12/6/2021	12/1/2021	12/1/2021	12/1/2021	12/2/2021	12/1/2021	12/1/2021
Parent Sample								RW-13B							
Analyte	Units	CAS No.	NYS AWQS												
2,2-oxybis(1-Chloropropane)		108-60-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ
Bis(2-ethylhexyl)phthalate		117-81-7	5	2 U	**1.7 J**	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U
4-Bromophenyl phenyl ether		101-55-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butyl benzyl phthalate		85-68-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Caprolactam		105-60-2	NE	10 R	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Carbazole		86-74-8	NE	**26**	**24**	**4.7 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**5 J**
4-Chloro-3-methylphenol		59-50-7	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline		106-47-8	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene		91-58-7	10*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol		95-57-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether		7005-72-3	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzofuran		132-64-9	NE	**4.9 J**	**4.9 J**	**4.5 J**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	**3.9 J**
3,3-Dichlorobenzidine		91-94-1	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,4-Dichlorophenol		120-83-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethyl phthalate		84-66-2	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl phthalate		131-11-3	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol		105-67-9	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butyl phthalate		84-74-2	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol		534-52-1	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		51-28-5	10*	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene		121-14-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2,6-Dinitrotoluene		606-20-2	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octyl phthalate		117-84-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Hexachlorobenzene		118-74-1	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene		77-47-4	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane		67-72-1	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Isophorone		78-59-1	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene		91-57-6	NE	**730**	**780**	**20**	10 U	10 U	**0.53 J**	10 U	10 U	10 U	10 U	10 U	**41**
2-Methylphenol (o-Cresol)		95-48-7	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol (p-Cresol)		106-44-5	1	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline		88-74-4	5	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ
3-Nitroaniline		99-09-2	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline		100-01-6	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene		98-95-3	0.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Nitrophenol		88-75-5	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol		100-02-7	NE	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Pentachlorophenol		87-86-5	1	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	**1.9 J**	20 U	20 U	20 U
Phenol		108-95-2	1	10 U	10 U	**1.5 J**	**0.76 J**	**1.9 J**	**2 J**	10 U	10 U	**0.33 J**	10 U	10 U	10 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RW-12A	RW-12B	RW-13A	RW-13B	RW-13B	RW-18A	RW-18B	RW-18C	RW-19A	RW-19C	RW-20A	RW-20B
			Sample Name	RW-12A	RW-12B	RW-13A	RW-13B	DUP-01	RW-18A	RW-18B	RW-18C	RW-19A	RW-19C	RW-20A	RW-20B
			Sample Date	11/29/2021	11/29/2021	11/29/2021	11/29/2021	11/29/2021	12/6/2021	12/1/2021	12/1/2021	12/1/2021	12/2/2021	12/1/2021	12/1/2021
			Parent Sample					RW-13B							
Analyte	**Units**	**CAS No.**	**NYS AWQS**												
1,2,4,5-Tetrachlorobenzene		95-94-3	5	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol		95-95-4	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol		88-06-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total SVOCs (ND=0)		TSVOC_ND0	NE	**4133.9**	**7901.8**	**210**	**2.26**	**2.61**	**18.03**	ND	ND	**2.23**	**1.5**	ND	**2256.5**
Cyanides	ug/L														
Free Cyanide		FREECN	NE	5 U	5 U	5 U	5 U	5 U	**2.5 J**	**8.9**	**3.8 J**	**5.5**	**2.3 J**	**2.3 J**	**6.1**
Total Cyanide		57-12-5	200	**17.2 J**	**60.1 J**	**155 J**	10 U	10 U	**13.8 J**	**286 J**	10 UJ	**994 J**	10 R	**291 J**	**397 J**

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RW-20B	RW-20B	RW-20C
			Sample Name	DUP-02	RW-20B	RW-20C
			Sample Date	12/1/2021	12/2/2021	12/1/2021
			Parent Sample	RW-20B		
Analyte	**Units**	**CAS No.**	**NYS AWQS**			
BTEX	ug/L					
Benzene		71-43-2	1	**370**	**480**	**210**
Toluene		108-88-3	5	**3.5**	**2.3**	**3.7**
Ethylbenzene		100-41-4	5	**350**	**51**	**160**
o-Xylene		95-47-6	5	**27**	**9.8**	**12**
m/p-Xylene		179601-23-1	5	**19**	**4.2**	**6**
Total BTEX (ND=0)		TBTEX_ND0	NE	**769.5**	**547.3**	**391.7**
Other VOCs	ug/L					
Acetone		67-64-1	50*	5 U	10 U	5 U
Bromochloromethane		74-97-5	5	1 U	2 U	1 U
Bromodichloromethane		75-27-4	50*	1 U	2 U	1 U
Bromoform		75-25-2	50*	1 UJ	2 U	1 UJ
Bromomethane		74-83-9	5	1 U	2 U	1 U
Carbon disulfide		75-15-0	60*	1 U	2 U	1 U
Carbon tetrachloride		56-23-5	5	1 UJ	2 U	1 UJ
Chlorobenzene		108-90-7	5	1 U	2 U	1 U
Chloroethane		75-00-3	5	1 U	2 U	1 U
Chloroform (Trichloromethane)		67-66-3	7	1 U	2 U	1 U
Chloromethane		74-87-3	5	1 U	2 U	1 U
Cyclohexane		110-82-7	NE	**0.39 J**	2 U	**0.38 J**
1,2-Dibromo-3-chloropropane		96-12-8	0.04	1 U	2 U	1 U
Dibromochloromethane		124-48-1	50*	1 UJ	2 U	1 UJ
1,2-Dibromoethane (EDB)		106-93-4	0.0006	1 U	2 U	1 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	1 U	2 U	1 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	1 U	2 U	1 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	1 U	2 U	1 U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	1 U	2 U	1 U
1,1-Dichloroethane		75-34-3	5	1 U	2 U	1 U
1,2-Dichloroethane		107-06-2	0.6	1 U	2 U	1 U
1,1-Dichloroethene		75-35-4	5	1 U	2 U	1 U
cis-1,2-Dichloroethene		156-59-2	5	1 U	2 U	1 U
trans-1,2-Dichloroethene		156-60-5	5	1 U	2 U	1 U
1,2-Dichloropropane		78-87-5	1	1 U	2 U	1 U
cis-1,3-Dichloropropene		10061-01-5	0.4	1 U	2 U	1 U
trans-1,3-Dichloropropene		10061-02-6	0.4	1 U	2 U	1 U
1,4-Dioxane		123-91-1	NE	50 U	100 U	50 U
2-Hexanone		591-78-6	50*	5 U	10 U	5 U
Isopropylbenzene		98-82-8	5	**46**	**28**	**34**
Methyl acetate		79-20-9	NE	5 U	10 U	5 U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	5 U	10 U	5 U
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	**0.25 J**	2 U	**0.8 J**

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

				Location Name	RW-20B	RW-20B	RW-20C
				Sample Name	DUP-02	RW-20B	RW-20C
				Sample Date	12/1/2021	12/2/2021	12/1/2021
				Parent Sample	RW-20B		
Analyte	**Units**	**CAS No.**	**NYS AWQS**				
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	5 U	10 U	5 U
Methylcyclohexane		108-87-2	NE	1 U	2 U	1 U
Methylene chloride		75-09-2	5	1 U	2 U	1 U
Styrene		100-42-5	5	1 U	2 U	1 U
1,1,2,2-Tetrachloroethane		79-34-5	5	1 U	2 U	1 U
Tetrachloroethene (PCE)		127-18-4	5	1 U	2 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	1 U	2 U	1 U
1,2,3-Trichlorobenzene		87-61-6	5	1 U	2 U	1 U
1,2,4-Trichlorobenzene		120-82-1	5	1 U	2 U	1 U
1,1,1-Trichloroethane (TCA)		71-55-6	5	1 U	2 U	1 U
1,1,2-Trichloroethane		79-00-5	1	1 U	2 U	1 U
Trichloroethene (TCE)		79-01-6	5	1 U	2 U	1 U
Trichlorofluoromethane (Freon 11)		75-69-4	5	1 U	2 U	1 U
Vinyl chloride		75-01-4	2	1 U	2 U	1 U
Total VOCs (ND=0)		TVOC_ND0	NE	**816.14**	**575.3**	**426.88**
PAH17	ug/L					
Acenaphthene		83-32-9	20*	**66**	**71**	**29**
Acenaphthylene		208-96-8	NE	10 U	10 U	**12**
Anthracene		120-12-7	50*	**3.4 J**	10 U	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	**1 J**	10 U	10 U
Fluorene		86-73-7	50*	**19**	**13**	**5.1 J**
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	**46**	**6 J**	10 U
Naphthalene		91-20-3	10*	**2300**	**340**	**14**
Phenanthrene		85-01-8	50*	**19**	**7.5 J**	10 U
Pyrene		129-00-0	50*	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	**2454.4**	**437.5**	**60.1**
PAH17 Other SVOCs	ug/L					
Acetophenone		98-86-2	NE	10 U	10 U	10 U
Atrazine		1912-24-9	7.5	2 U	2 U	2 U
Benzaldehyde		100-52-7	NE	10 U	10 U	10 U
Biphenyl (1,1-Biphenyl)		92-52-4	5	**4.7 J**	10 U	**2.5 J**
Bis(2-chloroethoxy)methane		111-91-1	5	10 U	10 U	10 U
Bis(2-chloroethyl)ether		111-44-4	1	1 U	1 U	1 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

				Location Name	RW-20B	RW-20B	RW-20C
				Sample Name	DUP-02	RW-20B	RW-20C
				Sample Date	12/1/2021	12/2/2021	12/1/2021
				Parent Sample	RW-20B		
Analyte	Units	CAS No.	NYS AWQS				
2,2-oxybis(1-Chloropropane)		108-60-1	5		10 UJ	10 U	10 UJ
Bis(2-ethylhexyl)phthalate		117-81-7	5		2 U	2 UJ	2 U
4-Bromophenyl phenyl ether		101-55-3	NE		10 U	10 U	10 U
Butyl benzyl phthalate		85-68-7	50*		10 U	10 U	10 U
Caprolactam		105-60-2	NE		10 U	10 U	10 U
Carbazole		86-74-8	NE		**5.7 J**	**9.8 J**	**8.2 J**
4-Chloro-3-methylphenol		59-50-7	NE		10 U	10 U	10 U
4-Chloroaniline		106-47-8	5		10 U	10 U	10 U
2-Chloronaphthalene		91-58-7	10*		10 U	10 U	10 U
2-Chlorophenol		95-57-8	NE		10 U	10 U	10 U
4-Chlorophenyl phenyl ether		7005-72-3	NE		10 U	10 U	10 U
Dibenzofuran		132-64-9	NE		**3.7 J**	**2.8 J**	10 U
3,3-Dichlorobenzidine		91-94-1	5		10 U	10 U	10 U
2,4-Dichlorophenol		120-83-2	5		10 U	10 U	10 U
Diethyl phthalate		84-66-2	50*		10 U	10 U	10 U
Dimethyl phthalate		131-11-3	50*		10 U	10 U	10 U
2,4-Dimethylphenol		105-67-9	50*		10 U	10 U	10 U
Di-n-butyl phthalate		84-74-2	50		10 U	10 U	10 U
4,6-Dinitro-2-methylphenol		534-52-1	NE		20 U	20 U	20 U
2,4-Dinitrophenol		51-28-5	10*		20 U	20 U	20 U
2,4-Dinitrotoluene		121-14-2	5		2 U	2 U	2 U
2,6-Dinitrotoluene		606-20-2	5		2 U	2 U	2 U
Di-n-octyl phthalate		117-84-0	50*		10 U	10 U	10 U
Hexachlorobenzene		118-74-1	0.04		1 U	1 U	1 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5		1 U	1 U	1 U
Hexachlorocyclopentadiene		77-47-4	5		10 U	10 U	10 U
Hexachloroethane		67-72-1	5		2 U	2 U	2 U
Isophorone		78-59-1	50*		10 U	10 U	10 U
2-Methylnaphthalene		91-57-6	NE		**46**	**6 J**	10 U
2-Methylphenol (o-Cresol)		95-48-7	1		10 U	10 U	10 U
4-Methylphenol (p-Cresol)		106-44-5	1		10 U	10 U	10 U
2-Nitroaniline		88-74-4	5		10 UJ	10 U	10 UJ
3-Nitroaniline		99-09-2	5		10 U	10 U	10 U
4-Nitroaniline		100-01-6	5		10 U	10 U	10 U
Nitrobenzene		98-95-3	0.4		1 U	1 U	1 U
2-Nitrophenol		88-75-5	NE		10 U	10 U	10 U
4-Nitrophenol		100-02-7	NE		20 U	20 U	20 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*		10 U	10 U	10 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE		1 U	1 U	1 U
Pentachlorophenol		87-86-5	1		20 U	20 U	20 U
Phenol		108-95-2	1		10 U	**2 J**	10 U

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RW-20B	RW-20B	RW-20C
			Sample Name	DUP-02	RW-20B	RW-20C
			Sample Date	12/1/2021	12/2/2021	12/1/2021
			Parent Sample	RW-20B		
Analyte	**Units**	**CAS No.**	**NYS AWQS**			
1,2,4,5-Tetrachlorobenzene		95-94-3	5	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	10 U	10 U	10 U
2,4,5-Trichlorophenol		95-95-4	NE	10 U	10 U	10 U
2,4,6-Trichlorophenol		88-06-2	NE	10 U	10 U	10 U
Total SVOCs (ND=0)		TSVOC_ND0	NE	**2468.5**	**452.1**	**70.8**
Cyanides	ug/L					
Free Cyanide		FREECN	NE	**2.3 J**	**3.5 J**	**2.3 J**
Total Cyanide		57-12-5	200	**353 J**	**343 J**	10 UJ

Table 4. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Notes:
Analytes in blue are not detected in any sample
ug/L = micrograms per liter or parts per billion (ppb)

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound

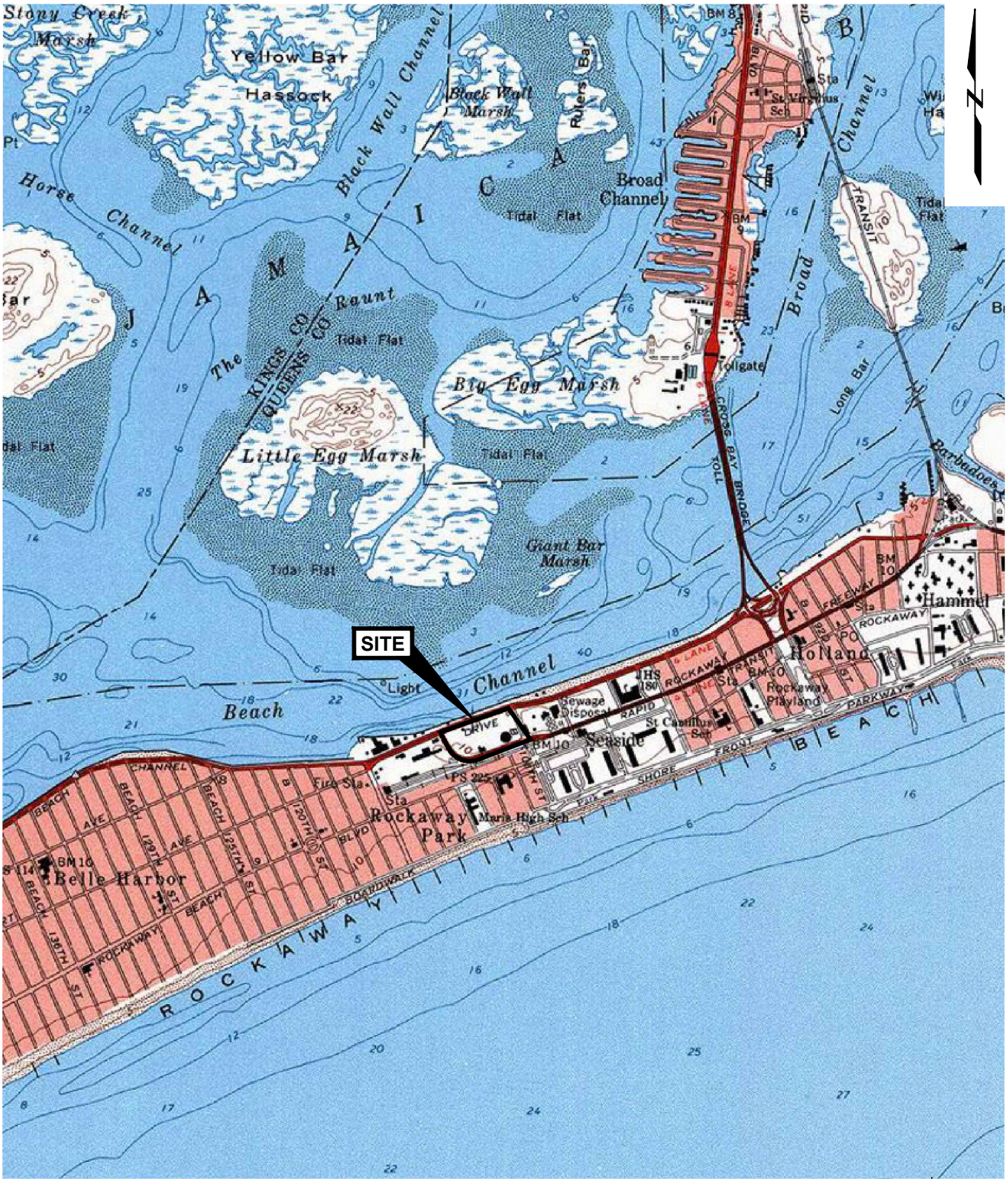
Total BTEX, Total VOCs, Total PAHs, and Total SVOCs are calculated using detects only.
Total PAH17 is calculated using the list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, 2-Methylnaphthalene, Phenanthrene, and Pyrene

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

CAS No. = Chemical Abstracts Service Number
MGP = Manufactured Gas Plant
ND = Not Detected
NE = Not Established
Bolding indicates a detected result concentration
Gray shading and bolding indicates that the detected result value exceeds the NYS AWQS

Data Qualifiers:
J = The result is an estimated value.
R = The result is rejected.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

Figures



SOURCE: Map created with TOPO! ® © 2001 National Geographic (www.nationalgeographic.com/topo)

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Rockaway Park Former MGP Site
Rockaway Park, New York

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SITE LOCATION MAP

Project 1905774 | May 2022 | Fig. 1

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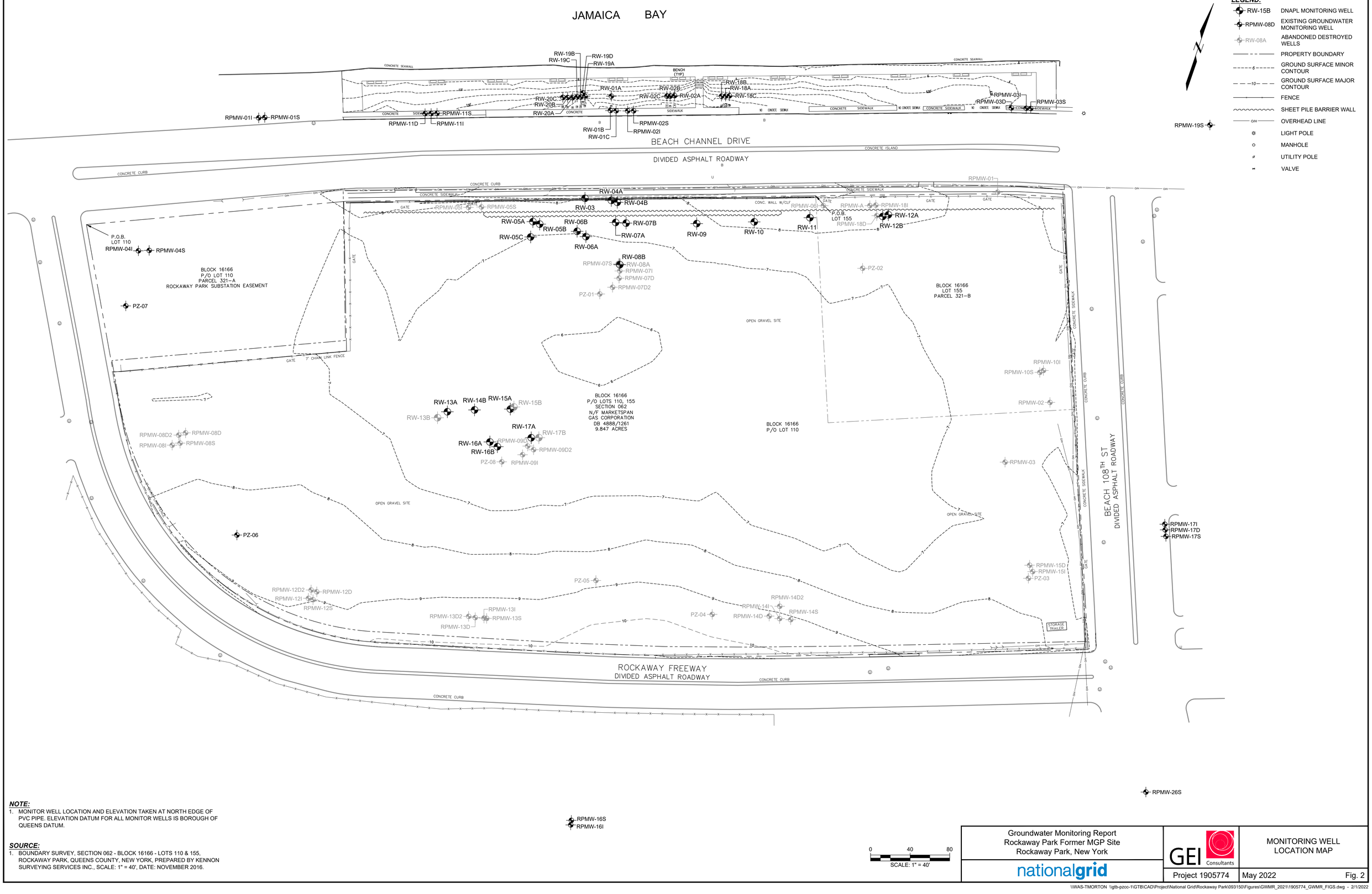

LEGEND:

- RW-15B — DNAPL MONITORING WELL
- RPMW-08D — EXISTING GROUNDWATER MONITORING WELL
- RW-08A — ABANDONED DESTROYED WELLS
- PROPERTY BOUNDARY
- 6 — GROUND SURFACE MINOR CONTOUR
- 10 — GROUND SURFACE MAJOR CONTOUR
- FENCE
- SHEET PILE BARRIER WALL
- OH — OVERHEAD LINE
- LIGHT POLE
- MANHOLE
- UTILITY POLE
- VALVE

NOTE:

1. MONITOR WELL LOCATION AND ELEVATION TAKEN AT NORTH EDGE OF PVC PIPE. ELEVATION DATUM FOR ALL MONITOR WELLS IS BOROUGH OF QUEENS DATUM.

SOURCE:

1. BOUNDARY SURVEY, SECTION 062 - BLOCK 16166 - LOTS 110 & 155, ROCKAWAY PARK, QUEENS COUNTY, NEW YORK, PREPARED BY KENNON SURVEYING SERVICES INC., SCALE: 1" = 40', DATE: NOVEMBER 2016.

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MONITORING WELL LOCATION MAP

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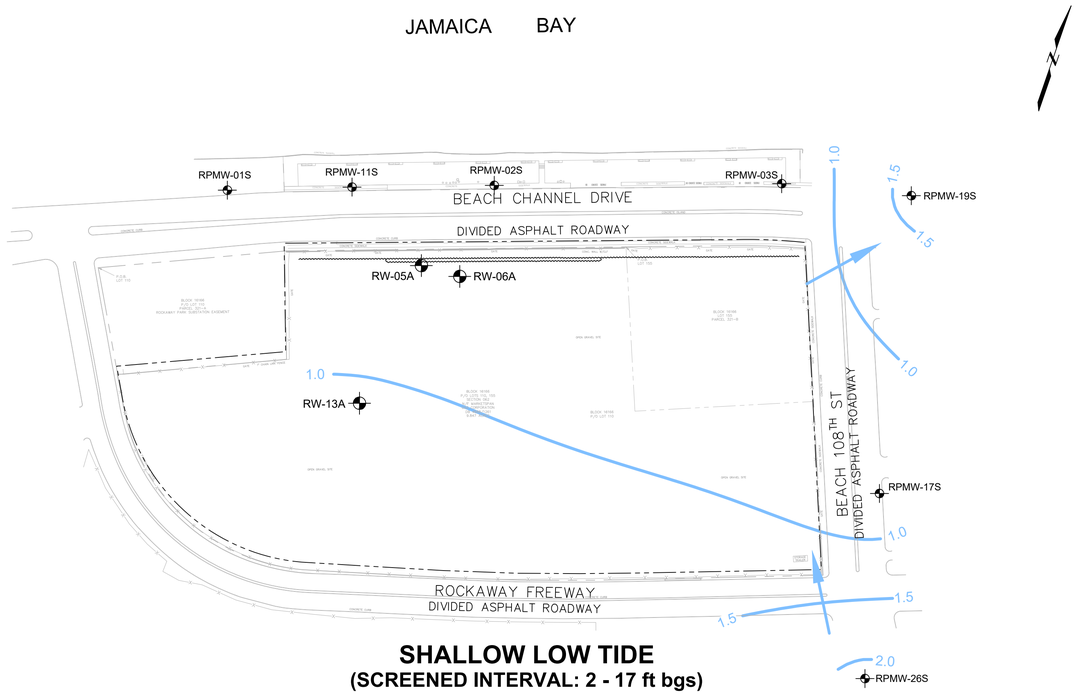
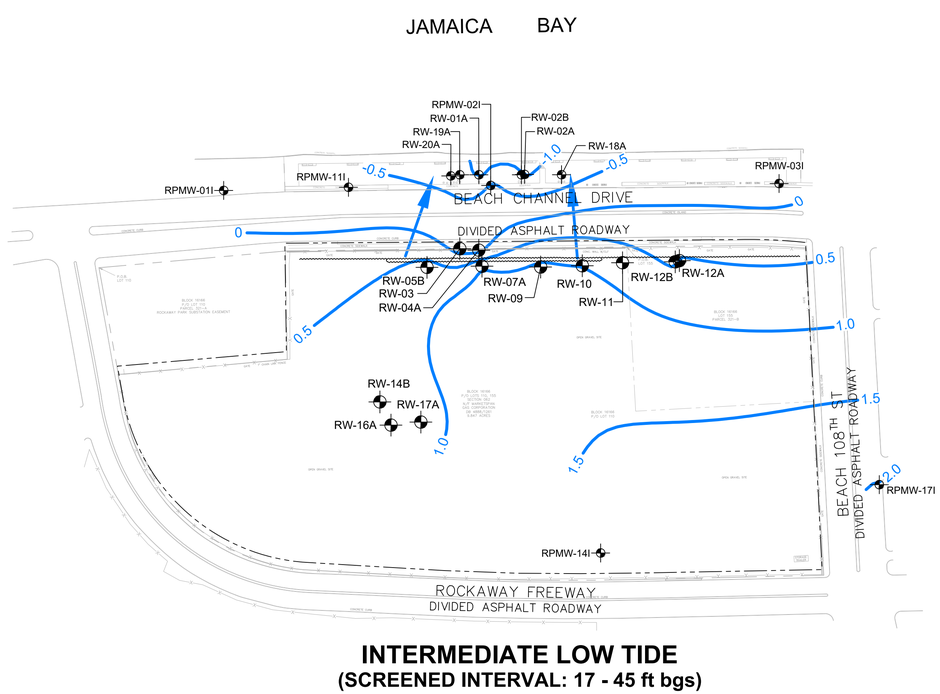
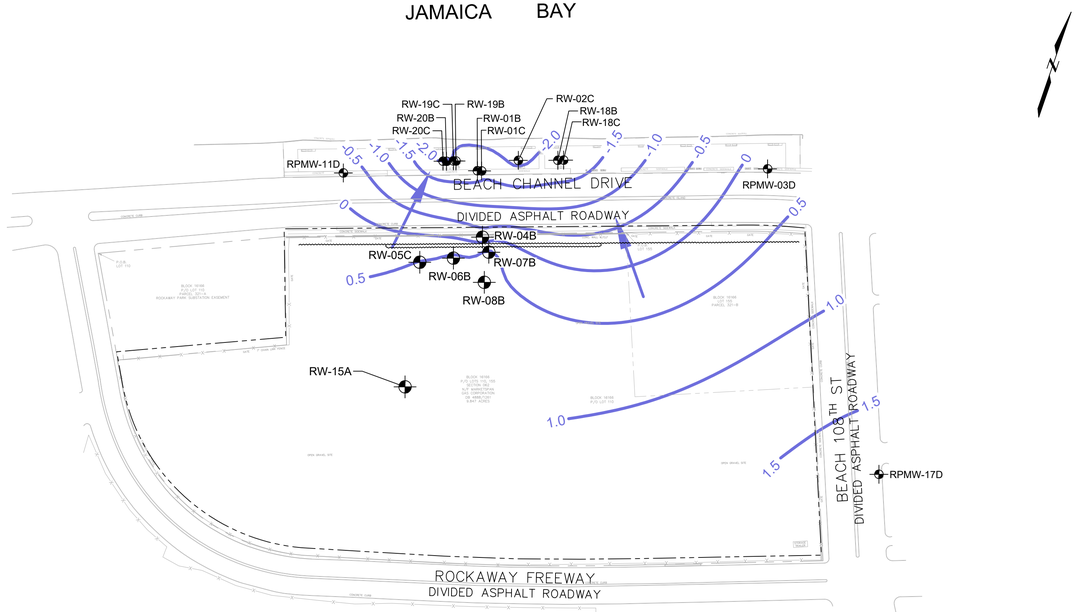


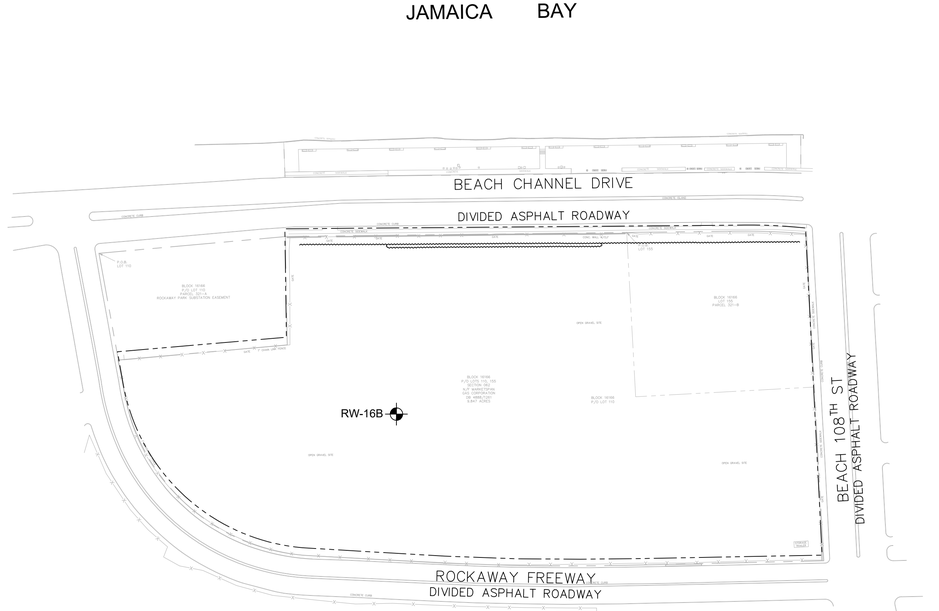
SHALLOW LOW TIDE
(SCREENED INTERVAL: 2 - 17 ft bgs)



INTERMEDIATE LOW TIDE
(SCREENED INTERVAL: 17 - 45 ft bgs)



DEEP LOW TIDE
(SCREENED INTERVAL: 45 - 90 ft bgs)



DEEP 2 LOW TIDE
(SCREENED INTERVAL: 90 - 105 ft bgs)

LEGEND:

- 1.5 — GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION
- PROPERTY BOUNDARY
- FENCE
- SHEET PILE BARRIER WALL
- ft bgs — FEET BELOW GROUND SURFACE

0 100 200
SCALE: 1" = 100'

NOTE:
1. CONTOURS ARE BASED ON THE DECEMBER 2018 SAMPLING EVENT.

SOURCE:
1. BOUNDARY SURVEY, SECTION 062 - BLOCK 16166 - LOTS 110 & 155, ROCKAWAY PARK, QUEENS COUNTY, NEW YORK, PREPARED BY KENNON SURVEYING SERVICES INC., SCALE: 1" = 40', DATE: NOVEMBER 2016.

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GROUNDWATER CONTOURS (LOW TIDE)

May 2022 Fig. 3

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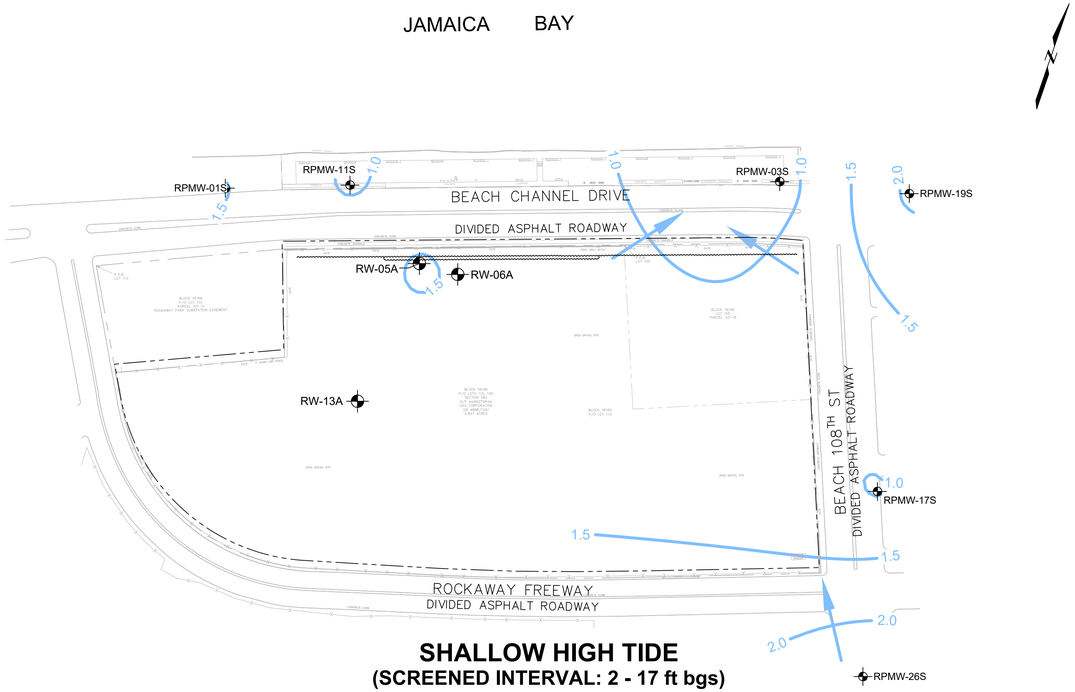
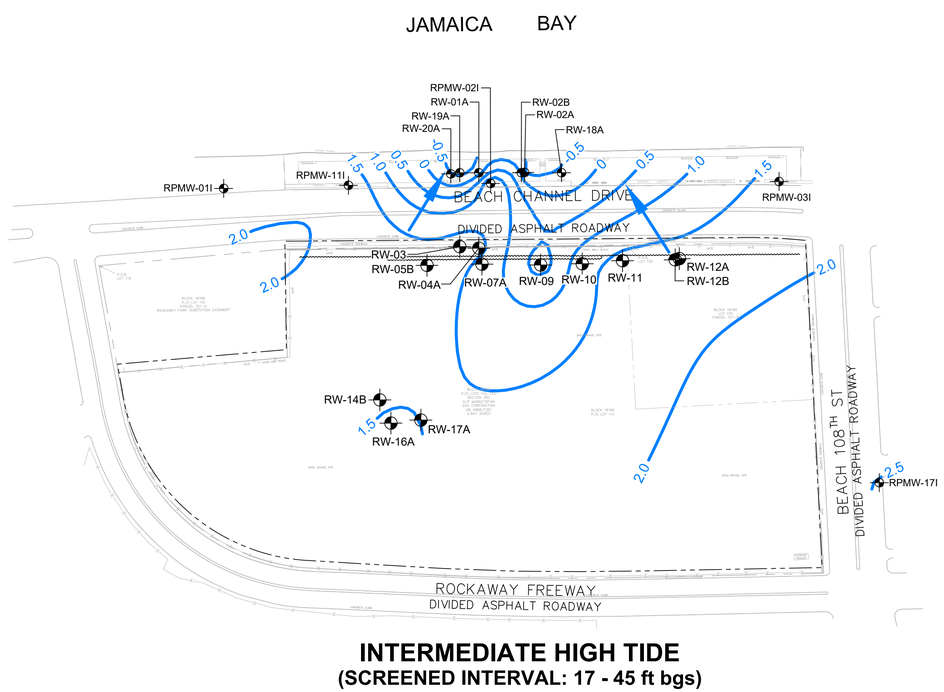
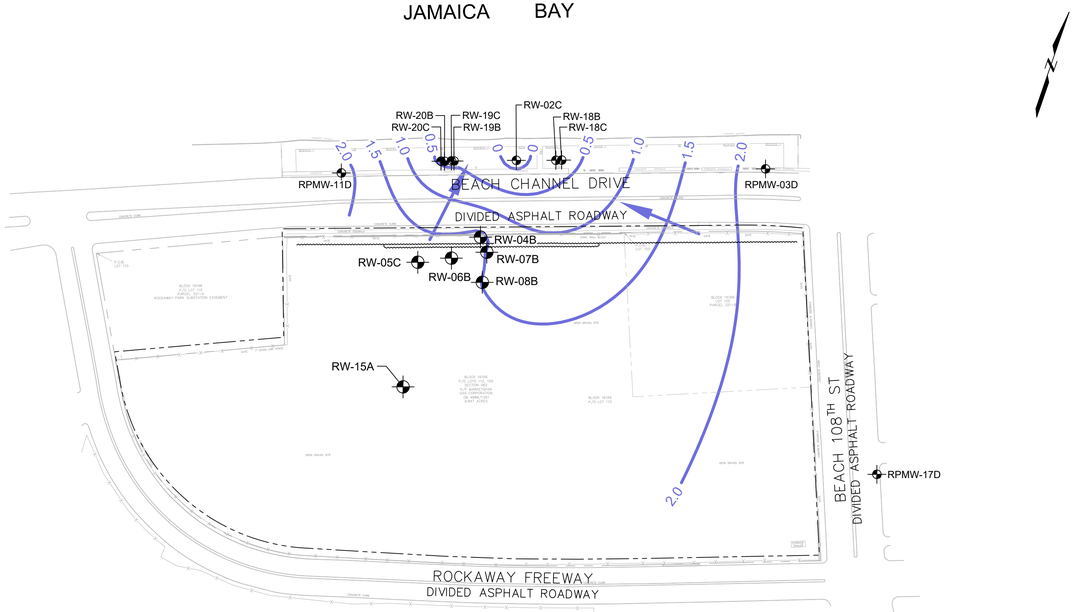


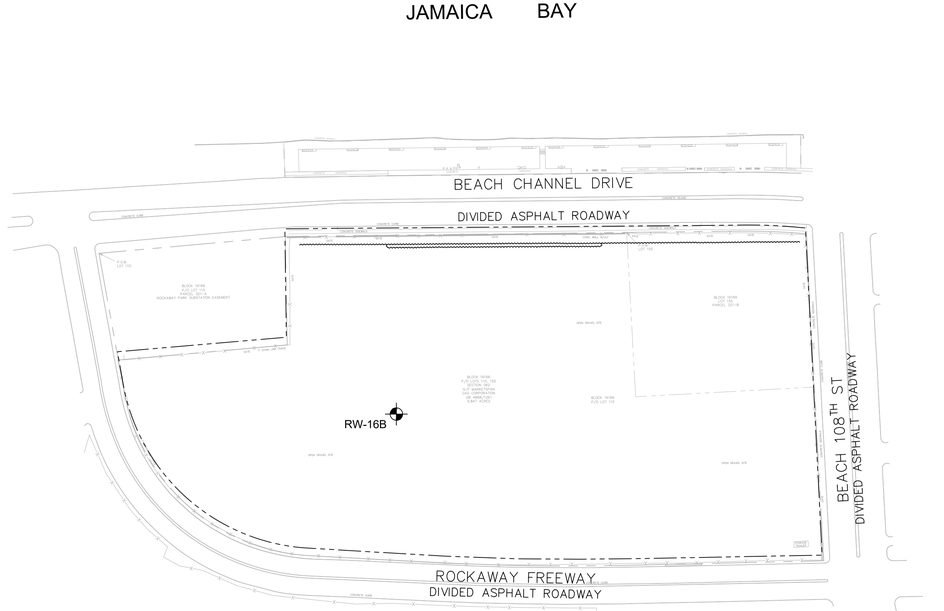
SHALLOW HIGH TIDE
(SCREENED INTERVAL: 2 - 17 ft bgs)



INTERMEDIATE HIGH TIDE
(SCREENED INTERVAL: 17 - 45 ft bgs)



DEEP HIGH TIDE
(SCREENED INTERVAL: 45 - 90 ft bgs)



DEEP 2 HIGH TIDE
(SCREENED INTERVAL: 90 - 105 ft bgs)

NOTE:
1. CONTOURS ARE BASED ON THE DECEMBER 2018 SAMPLING EVENT.

SOURCE:
1. BOUNDARY SURVEY, SECTION 062 - BLOCK 16166 - LOTS 110 & 155, ROCKAWAY PARK, QUEENS COUNTY, NEW YORK, PREPARED BY KENNON SURVEYING SERVICES INC., SCALE: 1" = 40', DATE: NOVEMBER 2016.

LEGEND:

1.5	GROUNDWATER CONTOUR
	GROUNDWATER FLOW DIRECTION
	PROPERTY BOUNDARY
	FENCE
	SHEET PILE BARRIER WALL
ft bgs	FEET BELOW GROUND SURFACE

0 75' 150' 300'
SCALE: 1" = 150'

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GROUNDWATER CONTOURS
(HIGH TIDE)

Project 1905774 | May 2022 | Fig. 4

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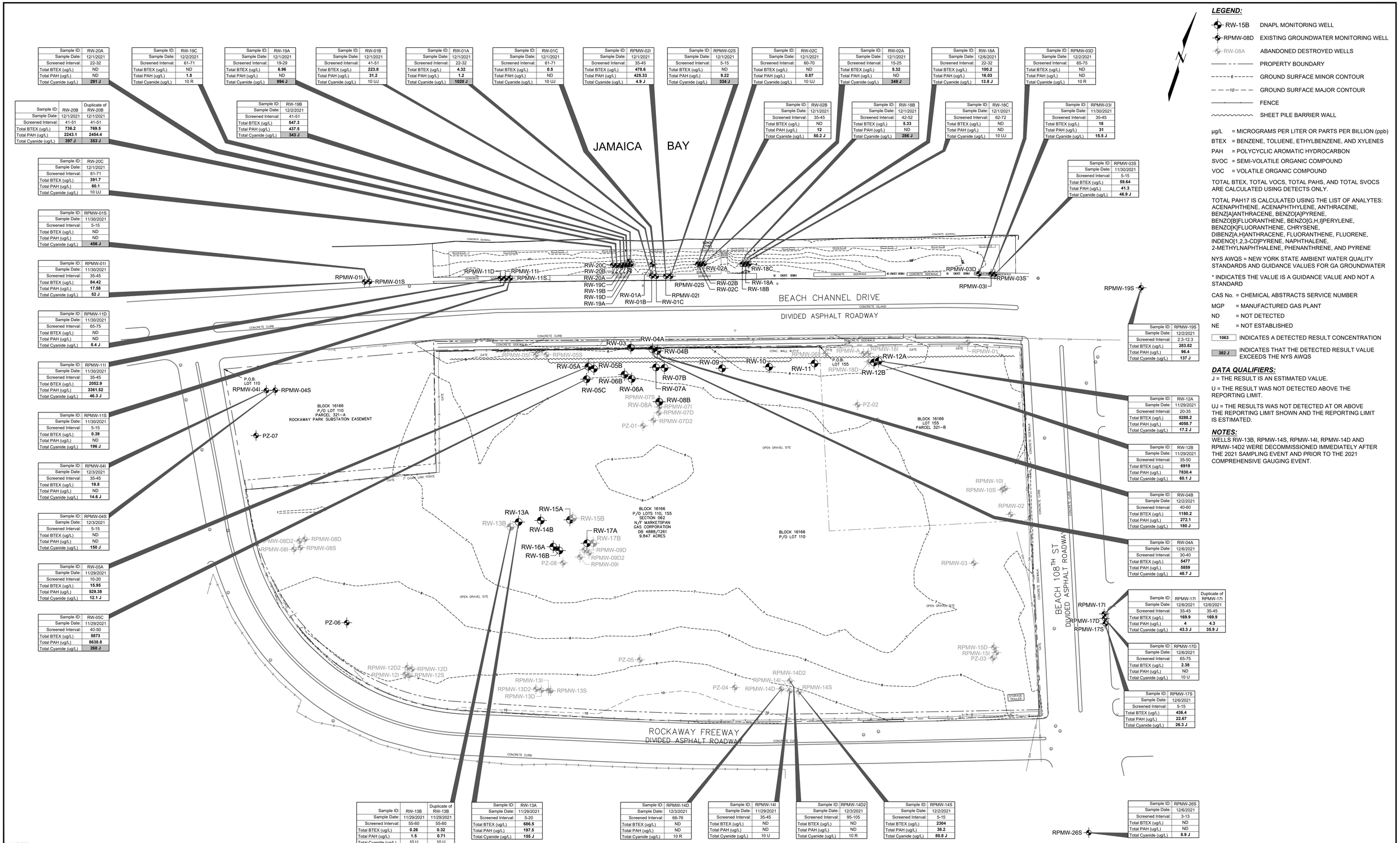


Sample ID:	RW-20A
Sample Date:	12/1/2021
Screened Interval:	22-32
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**291 J**

Sample ID:	RW-19C
Sample Date:	12/2/2021
Screened Interval:	61-71
Total PAH (ug/L)	**1.5**
Total Cyanide (ug/L)	10 R

Sample ID:	RW-19A
Sample Date:	12/1/2021
Screened Interval:	19-29
Total BTEX (ug/L)	**6.96**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**994 J**

Sample ID:	RW-01B
Sample Date:	12/1/2021
Screened Interval:	41-51
Total BTEX (ug/L)	**223.8**
Total PAH (ug/L)	**31.2**
Total Cyanide (ug/L)	10 UJ

Sample ID:	RW-01A
Sample Date:	12/1/2021
Screened Interval:	22-32
Total BTEX (ug/L)	**4.32**
Total PAH (ug/L)	**1.2**
Total Cyanide (ug/L)	**1020 J**

Sample ID:	RW-01C
Sample Date:	12/1/2021
Screened Interval:	61-71
Total BTEX (ug/L)	**0.5**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 UJ

Sample ID:	RPMW-02I
Sample Date:	12/1/2021
Screened Interval:	35-45
Total BTEX (ug/L)	**478.6**
Total PAH (ug/L)	**425.33**
Total Cyanide (ug/L)	**4.9 J**

Sample ID:	RPMW-02S
Sample Date:	12/1/2021
Screened Interval:	5-15
Total BTEX (ug/L)	ND
Total PAH (ug/L)	**9.22**
Total Cyanide (ug/L)	**334 J**

Sample ID:	RW-02C
Sample Date:	12/1/2021
Screened Interval:	60-70
Total BTEX (ug/L)	ND
Total PAH (ug/L)	**0.87**
Total Cyanide (ug/L)	10 UJ

Sample ID:	RW-02A
Sample Date:	12/1/2021
Screened Interval:	15-25
Total BTEX (ug/L)	**5.32**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**349 J**

Sample ID:	RW-18A
Sample Date:	12/6/2021
Screened Interval:	22-32
Total BTEX (ug/L)	**100.2**
Total PAH (ug/L)	**16.03**
Total Cyanide (ug/L)	**13.8 J**

Sample ID:	RPMW-03D
Sample Date:	12/2/2021
Screened Interval:	65-75
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 R

Sample ID:	RW-20B	Duplicate of RW-20B
Sample Date:	12/1/2021	12/1/2021
Screened Interval:	41-51	41-51
Total BTEX (ug/L)	**736.2**	**769.5**
Total PAH (ug/L)	**2243.1**	**2454.4**
Total Cyanide (ug/L)	**397 J**	**353 J**

Sample ID:	RW-19B
Sample Date:	12/2/2021
Screened Interval:	41-51
Total BTEX (ug/L)	**547.3**
Total PAH (ug/L)	**437.5**
Total Cyanide (ug/L)	**343 J**

Sample ID:	RW-02B
Sample Date:	12/1/2021
Screened Interval:	35-45
Total BTEX (ug/L)	ND
Total PAH (ug/L)	**12**
Total Cyanide (ug/L)	**50.2 J**

Sample ID:	RW-18B
Sample Date:	12/1/2021
Screened Interval:	42-52
Total BTEX (ug/L)	**5.33**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**286 J**

Sample ID:	RW-18C
Sample Date:	12/1/2021
Screened Interval:	62-72
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 UJ

Sample ID:	RPMW-03I
Sample Date:	11/30/2021
Screened Interval:	35-45
Total BTEX (ug/L)	**18**
Total PAH (ug/L)	**31**
Total Cyanide (ug/L)	**15.5 J**

Sample ID:	RW-20C
Sample Date:	12/1/2021
Screened Interval:	61-71
Total BTEX (ug/L)	**391.7**
Total PAH (ug/L)	**60.1**
Total Cyanide (ug/L)	10 UJ

Sample ID:	RPMW-03S
Sample Date:	11/30/2021
Screened Interval:	5-15
Total BTEX (ug/L)	**59.64**
Total PAH (ug/L)	**41.3**
Total Cyanide (ug/L)	**46.9 J**

Sample ID:	RPMW-01S
Sample Date:	11/30/2021
Screened Interval:	5-15
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**456 J**

Sample ID:	RPMW-01I
Sample Date:	11/30/2021
Screened Interval:	35-45
Total BTEX (ug/L)	**84.42**
Total PAH (ug/L)	**17.58**
Total Cyanide (ug/L)	**52 J**

Sample ID:	RPMW-11D
Sample Date:	11/30/2021
Screened Interval:	65-75
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**8.4 J**

Sample ID:	RPMW-19S
Sample Date:	12/2/2021
Screened Interval:	2.3-12.3
Total BTEX (ug/L)	**283.82**
Total PAH (ug/L)	**96.4**
Total Cyanide (ug/L)	**137 J**

Sample ID:	RPMW-11I
Sample Date:	11/30/2021
Screened Interval:	35-45
Total BTEX (ug/L)	**2052.9**
Total PAH (ug/L)	**3361.52**
Total Cyanide (ug/L)	**46.3 J**

Sample ID:	RW-12A
Sample Date:	11/29/2021
Screened Interval:	20-35
Total BTEX (ug/L)	**5288.2**
Total PAH (ug/L)	**4058.7**
Total Cyanide (ug/L)	**17.2 J**

Sample ID:	RW-11S
Sample Date:	11/30/2021
Screened Interval:	5-15
Total BTEX (ug/L)	**0.39**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**196 J**

Sample ID:	RW-12B
Sample Date:	11/29/2021
Screened Interval:	35-50
Total BTEX (ug/L)	**6919**
Total PAH (ug/L)	**7830.4**
Total Cyanide (ug/L)	**60.1 J**

Sample ID:	RPMW-04I
Sample Date:	12/3/2021
Screened Interval:	35-45
Total BTEX (ug/L)	**19.8**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**14.6 J**

Sample ID:	RW-04B
Sample Date:	12/2/2021
Screened Interval:	40-60
Total BTEX (ug/L)	**1180.2**
Total PAH (ug/L)	**272.1**
Total Cyanide (ug/L)	**180 J**

Sample ID:	RPMW-04S
Sample Date:	11/29/2021
Screened Interval:	5-15
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**150 J**

Sample ID:	RW-04A
Sample Date:	12/6/2021
Screened Interval:	30-40
Total BTEX (ug/L)	**5477**
Total PAH (ug/L)	**5859**
Total Cyanide (ug/L)	**48.7 J**

Sample ID:	RW-05A
Sample Date:	11/29/2021
Screened Interval:	10-20
Total BTEX (ug/L)	**15.95**
Total PAH (ug/L)	**529.38**
Total Cyanide (ug/L)	**12.1 J**

Sample ID:	RPMW-17I	Duplicate of RPMW-17I
Sample Date:	12/6/2021	12/6/2021
Screened Interval:	35-45	35-45
Total BTEX (ug/L)	**169.9**	**169.9**
Total PAH (ug/L)	**4**	**4.3**
Total Cyanide (ug/L)	**43.3 J**	**35.9 J**

Sample ID:	RW-05C
Sample Date:	11/29/2021
Screened Interval:	40-50
Total BTEX (ug/L)	**5873**
Total PAH (ug/L)	**8638.8**
Total Cyanide (ug/L)	**268 J**

Sample ID:	RPMW-17D
Sample Date:	12/6/2021
Screened Interval:	65-75
Total BTEX (ug/L)	**2.38**
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 U

Sample ID:	RPMW-17S
Sample Date:	12/6/2021
Screened Interval:	5-15
Total BTEX (ug/L)	**436.4**
Total PAH (ug/L)	**22.67**
Total Cyanide (ug/L)	**26.3 J**

Sample ID:	RW-13B	Duplicate of RW-13B
Sample Date:	11/29/2021	11/29/2021
Screened Interval:	55-60	55-60
Total BTEX (ug/L)	**0.26**	**0.32**
Total PAH (ug/L)	**1.5**	**0.71**
Total Cyanide (ug/L)	10 U	10 U

Sample ID:	RW-13A
Sample Date:	11/29/2021
Screened Interval:	5-20
Total BTEX (ug/L)	**686.5**
Total PAH (ug/L)	**197.5**
Total Cyanide (ug/L)	**155 J**

Sample ID:	RPMW-14D
Sample Date:	12/3/2021
Screened Interval:	66-76
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 R

Sample ID:	RPMW-14I
Sample Date:	11/29/2021
Screened Interval:	35-45
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 U

Sample ID:	RPMW-14D2
Sample Date:	12/3/2021
Screened Interval:	95-105
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	10 R

Sample ID:	RPMW-14S
Sample Date:	12/2/2021
Screened Interval:	5-15
Total BTEX (ug/L)	**2304**
Total PAH (ug/L)	**38.2**
Total Cyanide (ug/L)	**80.8 J**

Sample ID:	RPMW-26S
Sample Date:	12/6/2021
Screened Interval:	3-13
Total BTEX (ug/L)	ND
Total PAH (ug/L)	ND
Total Cyanide (ug/L)	**8.9 J**

LEGEND:

- RW-15B — DNAPL MONITORING WELL
- RPMW-08D — EXISTING GROUNDWATER MONITORING WELL
- RW-08A — ABANDONED DESTROYED WELLS
- PROPERTY BOUNDARY
- 6 — GROUND SURFACE MINOR CONTOUR
- 10 — GROUND SURFACE MAJOR CONTOUR
- FENCE
- SHEET PILE BARRIER WALL

µg/L = MICROGRAMS PER LITER OR PARTS PER BILLION (ppb)

BTEX = BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

PAH = POLYCYCLIC AROMATIC HYDROCARBON

SVOC = SEMI-VOLATILE ORGANIC COMPOUND

VOC = VOLATILE ORGANIC COMPOUND

TOTAL BTEX, TOTAL VOCS, TOTAL PAHS, AND TOTAL SVOCS ARE CALCULATED USING DETECTS ONLY.

TOTAL PAH17 IS CALCULATED USING THE LIST OF ANALYTES: ACENAPHTHENE, ACENAPHTHYLENE, ANTHRACENE, BENZ[A]ANTHRACENE, BENZO[A]PYRENE, BENZO[B]FLUORANTHENE, BENZO[G,H,I]PERYLENE, BENZO[K]FLUORANTHENE, CHRYSENE, DIBENZ[A,H]ANTHRACENE, FLUORANTHENE, FLUORENE, INDENO(1,2,3-CD]PYRENE, NAPHTHALENE, 2-METHYLNAPHTHALENE, PHENANTHRENE, AND PYRENE

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

CAS No. = CHEMICAL ABSTRACTS SERVICE NUMBER

MGP = MANUFACTURED GAS PLANT

ND = NOT DETECTED

NE = NOT ESTABLISHED

1063 — INDICATES A DETECTED RESULT CONCENTRATION

382 J — INDICATES THAT THE DETECTED RESULT VALUE EXCEEDS THE NYS AWQS

DATA QUALIFIERS:

J = THE RESULT IS AN ESTIMATED VALUE.

U = THE RESULT WAS NOT DETECTED ABOVE THE REPORTING LIMIT.

UJ = THE RESULTS WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT SHOWN AND THE REPORTING LIMIT IS ESTIMATED.

NOTES:

WELLS RW-13B, RPMW-14S, RPMW-14I, RPMW-14D AND RPMW-14D2 WERE DECOMMISSIONED IMMEDIATELY AFTER THE 2021 SAMPLING EVENT AND PRIOR TO THE 2021 COMPREHENSIVE GAUGING EVENT.

NOTE:

MONITOR WELL LOCATION AND ELEVATION TAKEN AT NORTH EDGE OF PVC PIPE. ELEVATION DATUM FOR ALL MONITOR WELLS IS BOROUGH OF QUEENS DATUM.

SOURCE:

BOUNDARY SURVEY, SECTION 062 - BLOCK 16166 - LOTS 110 & 155, ROCKAWAY PARK, QUEENS COUNTY, NEW YORK, PREPARED BY KENNON SURVEYING SERVICES INC., SCALE: 1" = 40', DATE: NOVEMBER 2016.

0 50 100

SCALE: 1" = 50'

Groundwater Monitoring Report
Rockaway Park Former MGP Site
Rockaway Park, New York

nationalgrid

GEI Consultants

GROUNDWATER ANALYTICAL RESULTS

Project 1905774 | May 2022 | Fig. 5

\\WAS-TMORTON \\gtb-pzcc-1\GTB\CAD\Project\National Grid\Rockaway Park\093150\Figures\GWMR_2021\1905774_GWMR_FIGS.dwg - 2/1/2022

Appendix A

Sampling Results Letter, July 14, 2021

Michael Quinlan
Senior Program Manager

nationalgrid

July 14, 2021

Mr. Douglas MacNeal
New York State Department of Environmental Conservation
MGP Remedial Section, Division of Environmental Remediation
Bureau of Western Remedial Action, 11th Floor
625 Broadway
Albany, NY 12233-7017

Re: Sampling Results Requested for Approval of Well Abandonment Work Plan
Rockaway Park Former MGP Site
Site No. 241029

Dear Mr. MacNeal:

National Grid is providing this letter to present the results of the recent sampling you requested at the RPMW-08 Cluster at the Rockaway Park former Manufactured Gas plant (MGP) site (Site). The sampling was requested as a condition of your April 20, 2021 email approval of the April 5, 2021 Well Abandonment Work Plan for the abandonment of select monitoring and recovery wells at the Site.

On May 13, 2021, the four monitoring wells at the RPMW-08 Cluster (RPMW-08S, RPMW-08I, RPMW-08D, and RPMW-08D2) were sampled for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The analytical results met the New York State Ambient Water Quality Standards (AWQS) for benzene, toluene, ethylbenzene, and xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs) in groundwater. Concentrations of BTEX and PAHs at these wells were either not detected or detected below the AWQS as shown in **Table 1**. A Data Usability Summary Report for the collected samples is attached as Attachment 1.

Based on the results of the sampling, National Grid is prepared to abandon the wells in accordance with the work plan. If you have any questions, feel free to contact me at 516-220-4363 or via email at michael.quinlan@nationalgrid.com.

Sincerely,

for

Michael Quinlan
Senior Program Manager

Attachments
cc: J. Mitchell (National Grid)
\\GTB-pzcc-1\GTB\Data\WPROC\Project\NationalGrid\Rockaway Park\SMP\2021-Well Abandonment\SamplingLetter\Letter.hw241029.2021-07-14.WellSamplingResults.docx

175 East Old Country Road, Hicksville, NY 11801
T: 516.220.4363 ■ michael.quinlan@nationalgrid.com ■ www.nationalgrid.com

Table 1. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RPMW-08S	RPMW-08I	RPMW-08D	RPMW-08D2
			Sample Name	RPMW-08S	RPMW-08I	RPMW-08D	RPMW-08D2
			Sample Date	5/13/2021	5/13/2021	5/13/2021	5/13/2021
Analyte	**Units**	**CAS No.**	**NYS AWQS**				
BTEX	ug/L						
Benzene		71-43-2	1	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	**0.4 J**
Ethylbenzene		100-41-4	5	1 U	**0.41 J**	1 U	1 U
o-Xylene		95-47-6	5	1 U	**1.3**	1 U	1 U
m/p-Xylene		179601-23-1	5	1 U	1 U	1 U	1 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	**1.71**	ND	**0.4**
Other VOCs	ug/L						
Acetone		67-64-1	50*	5 U	5 U	5 U	**38 J**
Bromochloromethane		74-97-5	5	1 U	1 U	1 U	1 U
Bromodichloromethane		75-27-4	50*	1 U	1 U	1 U	1 U
Bromoform		75-25-2	50*	1 U	1 U	1 U	1 U
Bromomethane		74-83-9	5	1 U	1 U	1 U	1 U
Carbon disulfide		75-15-0	60*	1 U	1 U	1 U	**1**
Carbon tetrachloride		56-23-5	5	1 U	1 U	1 U	1 U
Chlorobenzene		108-90-7	5	1 U	1 U	1 U	1 U
Chloroethane		75-00-3	5	1 U	1 U	1 U	1 U
Chloroform (Trichloromethane)		67-66-3	7	1 U	1 U	1 U	**1.2**
Chloromethane		74-87-3	5	1 U	1 U	1 U	1 U
Cyclohexane		110-82-7	NE	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane		96-12-8	0.04	1 UJ	1 UJ	1 UJ	1 UJ
Dibromochloromethane		124-48-1	50*	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)		106-93-4	0.0006	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-DCB)		95-50-1	3	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene (m-DCB)		541-73-1	3	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene (p-DCB)		106-46-7	3	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)		75-71-8	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane		75-34-3	5	1 U	1 U	1 U	1 U
1,2-Dichloroethane		107-06-2	0.6	1 U	1 U	1 U	1 U
1,1-Dichloroethene		75-35-4	5	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene		156-59-2	5	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene		156-60-5	5	1 U	1 U	1 U	1 U
1,2-Dichloropropane		78-87-5	1	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		10061-01-5	0.4	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene		10061-02-6	0.4	1 U	1 U	1 U	1 U
1,4-Dioxane		123-91-1	NE	50 U	50 U	50 U	50 U
2-Hexanone		591-78-6	50*	5 UJ	5 UJ	5 UJ	5 UJ
Isopropylbenzene		98-82-8	5	1 U	**0.75 J**	1 U	1 U
Methyl acetate		79-20-9	NE	5 U	5 U	5 U	5 U
Methyl ethyl ketone (2-Butanone)		78-93-3	50*	5 U	5 U	5 U	**4.2 J**
Methyl tert-butyl ether (MTBE)		1634-04-4	10*	1 U	1 U	1 U	**0.65 J**
4-Methyl-2-pentanone (MIBK)		108-10-1	NE	5 U	5 U	5 U	5 U
Methylcyclohexane		108-87-2	NE	1 U	1 U	1 U	1 U
Methylene chloride		75-09-2	5	1 U	1 U	1 U	**0.92 J**
Styrene		100-42-5	5	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane		79-34-5	5	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)		127-18-4	5	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene		87-61-6	5	1 UJ	1 UJ	1 UJ	1 UJ
1,2,4-Trichlorobenzene		120-82-1	5	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane (TCA)		71-55-6	5	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane		79-00-5	1	1 U	1 U	1 U	1 U
Trichloroethene (TCE)		79-01-6	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)		75-69-4	5	1 U	1 U	1 U	1 U
Vinyl chloride		75-01-4	2	1 U	1 U	1 U	**0.59 J**
Total VOCs (ND=0)		TVOC_ND0	NE	ND	**2.46**	ND	**46.96**
PAH17	ug/L						
Acenaphthene		83-32-9	20*	10 U	**13**	10 U	10 U
Acenaphthylene		208-96-8	NE	10 U	**61**	10 U	10 U
Anthracene		120-12-7	50*	10 U	**1.3 J**	10 U	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U	1 U

Table 1. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

			Location Name	RPMW-08S	RPMW-08I	RPMW-08D	RPMW-08D2
			Sample Name	RPMW-08S	RPMW-08I	RPMW-08D	RPMW-08D2
			Sample Date	5/13/2021	5/13/2021	5/13/2021	5/13/2021
Analyte	**Units**	**CAS No.**	**NYS AWQS**				
Fluoranthene		206-44-0	50*	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	10 U	**2.9 J**	10 U	10 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	**0.68 J**
Naphthalene		91-20-3	10*	2 U	2 U	2 U	**1.9 J**
Phenanthrene		85-01-8	50*	10 U	**8.7 J**	10 U	10 U
Pyrene		129-00-0	50*	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	**86.9**	ND	**2.58**
PAH17 Other SVOCs	ug/L						
Acetophenone		98-86-2	NE	10 U	10 U	10 U	10 U
Atrazine		1912-24-9	7.5	2 U	2 U	2 U	2 U
Benzaldehyde		100-52-7	NE	10 UJ	10 UJ	10 UJ	10 UJ
Biphenyl (1,1-Biphenyl)		92-52-4	5	10 U	**3.6 J**	10 U	10 U
Bis(2-chloroethoxy)methane		111-91-1	5	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether		111-44-4	1	1 U	1 U	1 U	1 U
2,2-oxybis(1-Chloropropane)		108-60-1	5	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate		117-81-7	5	2 U	2 U	2 U	2 U
4-Bromophenyl phenyl ether		101-55-3	NE	10 U	10 U	10 U	10 U
Butyl benzyl phthalate		85-68-7	50*	10 U	10 U	10 U	10 U
Caprolactam		105-60-2	NE	10 U	10 U	10 U	10 U
Carbazole		86-74-8	NE	10 U	**1.3 J**	10 U	10 U
4-Chloro-3-methylphenol		59-50-7	NE	10 U	10 U	10 U	10 U
4-Chloroaniline		106-47-8	5	10 U	10 U	10 U	10 U
2-Chloronaphthalene		91-58-7	10*	10 U	10 U	10 U	10 U
2-Chlorophenol		95-57-8	NE	10 U	10 U	10 U	10 U
4-Chlorophenyl phenyl ether		7005-72-3	NE	10 U	10 U	10 U	10 U
Dibenzofuran		132-64-9	NE	10 U	**1.8 J**	10 U	10 U
3,3-Dichlorobenzidine		91-94-1	5	10 U	10 U	10 U	10 U
2,4-Dichlorophenol		120-83-2	5	10 U	10 U	10 U	10 U
Diethyl phthalate		84-66-2	50*	10 U	10 U	10 U	10 U
Dimethyl phthalate		131-11-3	50*	10 U	10 U	10 U	10 U
2,4-Dimethylphenol		105-67-9	50*	10 U	10 U	10 U	10 U
Di-n-butyl phthalate		84-74-2	50	10 U	10 U	10 U	10 U
4,6-Dinitro-2-methylphenol		534-52-1	NE	20 U	20 U	20 U	20 U
2,4-Dinitrophenol		51-28-5	10*	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene		121-14-2	5	2 U	2 U	2 U	2 U
2,6-Dinitrotoluene		606-20-2	5	2 U	2 U	2 U	2 U
Di-n-octyl phthalate		117-84-0	50*	10 U	10 U	10 U	10 U
Hexachlorobenzene		118-74-1	0.04	1 U	1 U	1 U	1 U
1,3-Hexachlorobutadiene (C-46)		87-68-3	0.5	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene		77-47-4	5	10 U	10 U	10 U	10 U
Hexachloroethane		67-72-1	5	2 U	2 U	2 U	2 U
Isophorone		78-59-1	50*	10 U	10 U	10 U	10 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	**0.68 J**
2-Methylphenol (o-Cresol)		95-48-7	1	10 U	10 U	10 U	10 U
4-Methylphenol (p-Cresol)		106-44-5	1	10 U	10 U	10 U	10 U
2-Nitroaniline		88-74-4	5	10 U	10 U	10 U	10 U
3-Nitroaniline		99-09-2	5	10 U	10 U	10 U	10 U
4-Nitroaniline		100-01-6	5	10 U	10 U	10 U	10 U
Nitrobenzene		98-95-3	0.4	1 U	1 U	1 U	1 U
2-Nitrophenol		88-75-5	NE	10 U	10 U	10 U	10 U
4-Nitrophenol		100-02-7	NE	20 U	20 U	20 U	20 U
N-Nitrosodiphenylamine (NDFA)		86-30-6	50*	10 U	10 U	10 U	10 U
N-Nitrosodi-n-propylamine (NDPA)		621-64-7	NE	1 U	1 U	1 U	1 U
Pentachlorophenol		87-86-5	1	20 U	20 U	20 U	20 U
Phenol		108-95-2	1	10 U	10 U	10 U	**1.6 J**
1,2,4,5-Tetrachlorobenzene		95-94-3	5	10 U	10 U	10 U	10 U
2,3,4,6-Tetrachlorophenol		58-90-2	NE	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol		95-95-4	NE	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol		88-06-2	NE	10 U	10 U	10 U	10 U
Total SVOCs (ND=0)		TSVOC_ND0	NE	ND	**93.6**	ND	**4.18**

Table 1. Rockaway Park Former MGP Site
Groundwater Analysis Results
National Grid
Rockaway Park, NY

Notes:
Analytes in blue are not detected in any sample
ug/L = micrograms per liter or parts per billion (ppb)

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound

Total BTEX, Total VOCs, Total PAHs, and Total SVOCs are calculated using detects only.
Total PAH17 is calculated using the list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, 2-

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

CAS No. = Chemical Abstracts Service Number
MGP = Manufactured Gas Plant
ND = Not Detected
NE = Not Established

Bolding indicates a detected result concentration
Gray shading and bolding indicates that the detected result value exceeds the NYS AWQS

Data Qualifiers:
J = The result is an estimated value.
U = The result was not detected above the reporting limit.
UJ = The result was not detected at or above the reporting limit shown and the reporting limit is estimated.

Site: National Grid Rockaway Park
Laboratory: Test America, Edison, NJ
Report Number: 460-234369
Reviewer: Lorie MacKinnon/GEI Consultants
Date: June 8, 2021

Sample Summary

FIELD ID	LAB ID	FRACTIONS
TB051321	460-234369-01	VOC
RPMW-08S	460-234369-02	VOC, SVOC
RPMW-08I	460-234369-03	VOC, SVOC
RPMW-08D	460-234369-04	VOC, SVOC
RPMW-08D2	460-234369-05	VOC, SVOC

Associated QC Samples:
Trip blank: TB051321

The above-listed aqueous samples and trip blank sample were collected on May 13, 2021 and were analyzed for volatile organic compounds (VOCs) by SW-846 method 8260D and semivolatile organic compounds (SVOCs) by SW-846 method 8270E. The data validation was performed based on the Standard Operating Procedure (SOP) HW-33 (Revision 3) *Low/Medium Volatile Data Validation* (March 2013) and SOP HW-35 (Revision 2) *Semivolatile Data Validation* (March 2013), as well as by the pertinent methods referenced by the data package and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Internal Standard Results
- Laboratory Control Sample (LCS)/LCS Duplicate (LCSD) Results
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

All results appear usable as reported or usable with minor qualification due to calibration nonconformances, trip blank contamination, and uncertainty for levels below the reporting limit. These results were considered valid; even though some were qualified as discussed below.

The validation findings were based on the following information.

Data Completeness

The data package was complete as received by the laboratory.

Holding Times and Sample Preservation

All hold time and sample preservation criteria were met.

Initial and Continuing Calibrations

All initial and continuing calibration criteria were met except where noted below.

Instrument/ Calibration Standard	Compound	Calibration Exceedance	Validation Qualifier
VOCs			
CVOAMS11: CCAL 05/18/21 6:34	2-Hexanone	21.1 %D	Estimate (UJ) the nondetect results for the affected compounds in the associated samples.
	1,2-Dibromo-3-chloropropane	23.3 %D	
	1,2,3-Trichlorobenzene	22.0 %D	
Associated samples: All samples			
SVOCs			
CBNAMS18 CCAL 05/15/21 17:15	Benzaldehyde	36.8 %D	Estimate (UJ) the nondetect results for benzaldehyde in the associated samples.
Associated samples: RPMW-08S, RPMW-08I, RPMW-08D			
CBNAMS18 CCAL 05/17/21 16:32	Benzaldehyde	38.1 %D	Estimate (UJ) the nondetect results for benzaldehyde in sample RPMW-08D2.
Associated sample: RPMW-08D2			

Initial calibration (ICAL) relative standard deviation (%RSD) > 20% for VOC and SVOC; estimate (J) positive and blank-qualified (UJ) results only.
Continuing calibration (CCAL) percent difference (%D) > 20% for VOC and SVOC; estimate (J/UJ) positive and nondetect results.
Response factor (RF) < 0.05; Estimate (J) positive results and reject (R) nondetect results.

Blanks

Contamination was not detected in the associated laboratory method blanks and trip blank samples except where noted below.

Analyte	Blank Type/ Associated Samples	Maximum Concentration	2x Action Level	10x Action Level	Validation Actions
Acetone	TB051321: All samples	5.4 ug/L	10.8 ug/L	54 ug/L	Qualify the result for acetone in sample RPMW-08D2 as estimated (J); High bias.

Blank Actions:
If the sample result is < RL (<2xRL for common contaminants); report the result as nondetect (U) at the reporting limit (RL) or reported value.
If the sample result is ≥ RL and <2xblank contamination detected; professional judgment was taken to report the result as nondetect (U) at the reported value.
If the sample result is ≥ 2xblank contamination detected and < 10x Action Level; professional judgment was taken to report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

Surrogate Recoveries

All surrogate recovery criteria were met.

MS/MSD Results

Project MS/MSDs were not associated with this sample set.

Internal Standard Results

All criteria were met.

LCS/LCSD Results

All LCS and LCSD criteria were met except where noted below.

LCS ID	Analyte	Recovery (%)	RPD (%)	Control Limits (%)	Validation Action/Bias
SVOCs					
LCS/LCSD 460-778125	Atrazine	172, 180	-	24-150	Validation actions were not required as the affected results were nondetect in the associated samples and were therefore not affected by the potential high bias.
	Benzaldehyde	157, 167	-	16-150	
Associated samples: RPMW-08S, RPMW-08I, RPMW-08D					
- Criteria met.					

Field Duplicate Results

A field duplicate pair was not associated with this sample set.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

Dilutions and/or re-analyses were not required.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Appendix B

Well Decommissioning Logs

FIGURE 3

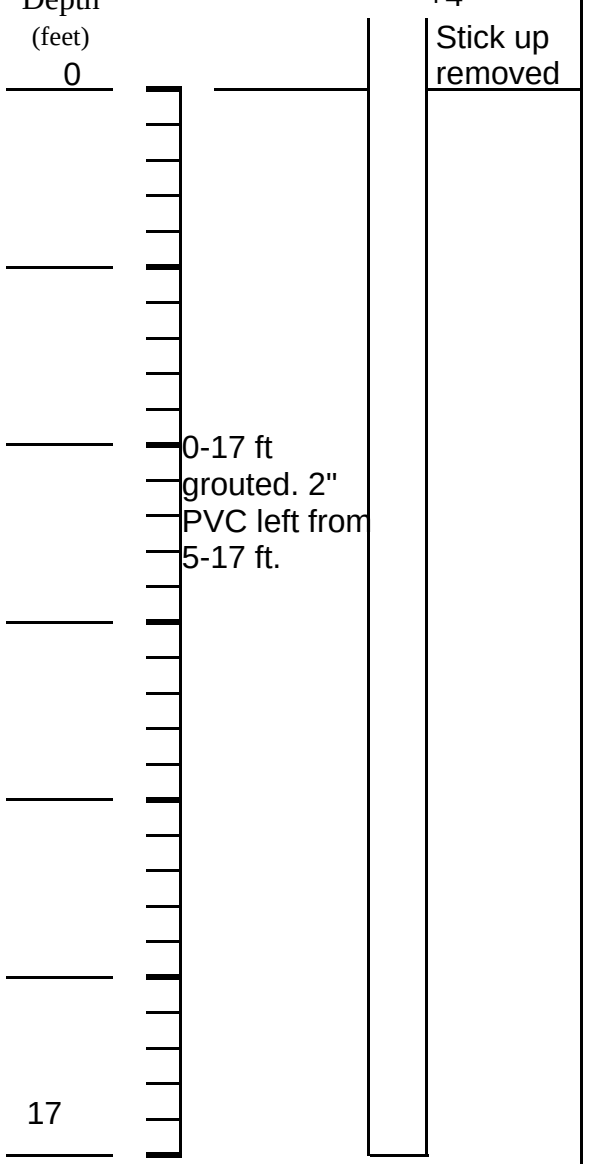
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-8S
Site Location: Western side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/7/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-17
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	5.5
Quantity of cement used (lbs.)	49
Cement type	Portland
Quantity of bentonite used (lbs.)	7
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	3
Volume of grout used (gal.)	3

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

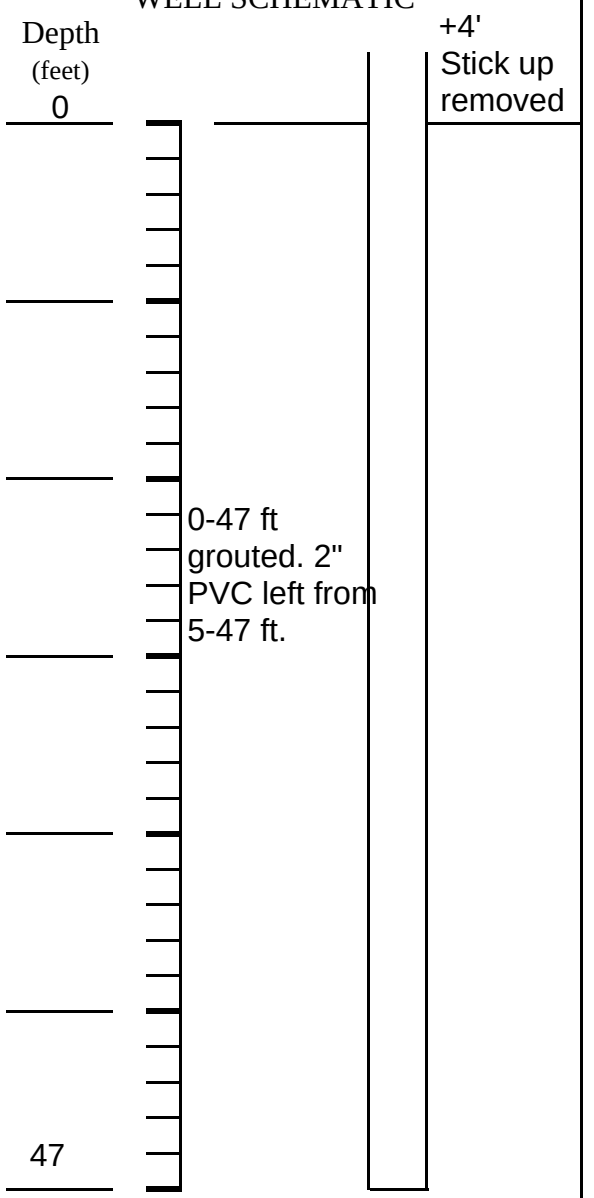
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-8I
Site Location: Western side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/7/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-47
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	14.2
Quantity of cement used (lbs.)	136.5
Cement type	Portland
Quantity of bentonite used (lbs.)	18.9
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	7.5
Volume of grout used (gal.)	7.5

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

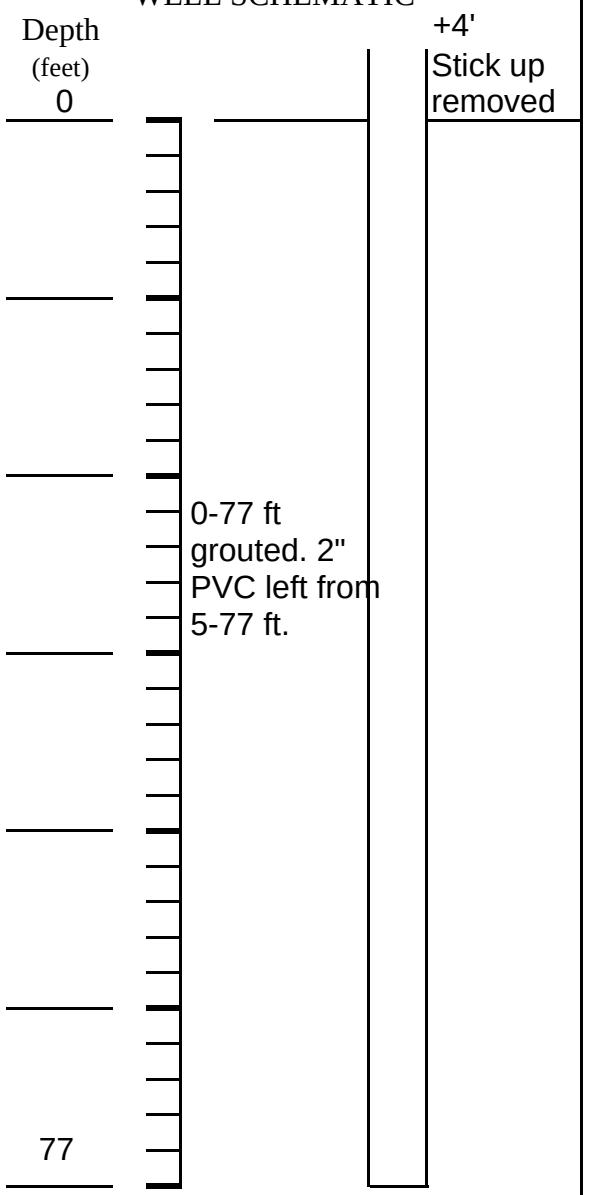
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-8D
Site Location: Western side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/7/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-77
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	23.3
Quantity of cement used (lbs.)	223.5
Cement type	Portland
Quantity of bentonite used (lbs.)	31
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	13
Volume of grout used (gal.)	13

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

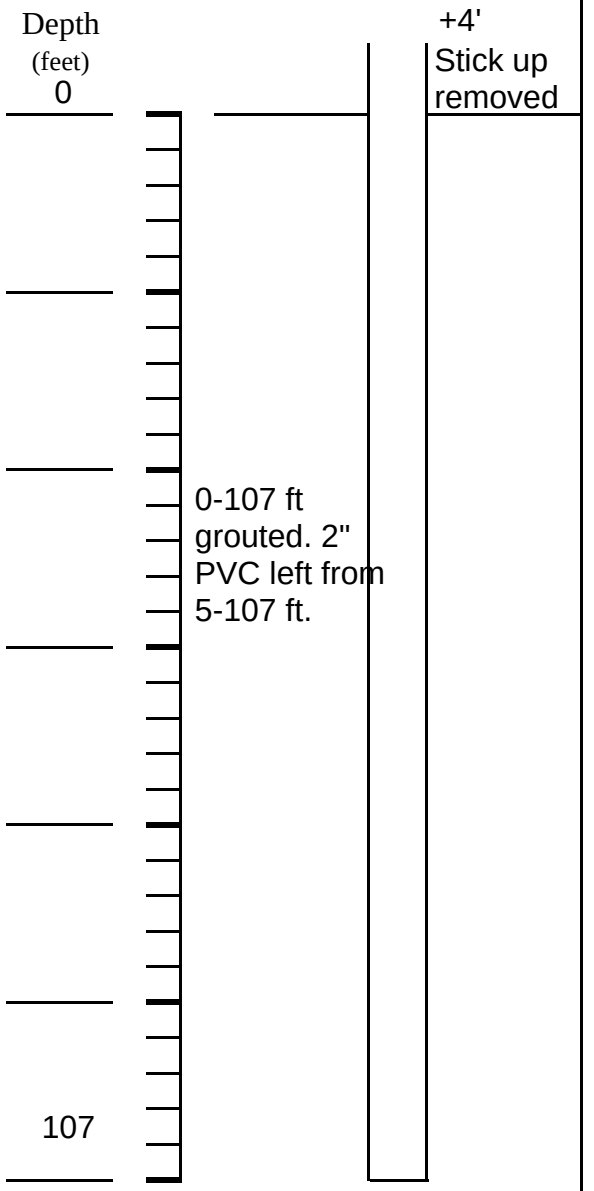
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-8D2
Site Location: Western side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/7/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-107
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	32.3
Quantity of cement used (lbs.)	310.6
Cement type	Portland
Quantity of bentonite used (lbs.)	43.15
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	17.12
Volume of grout used (gal.)	17.12

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

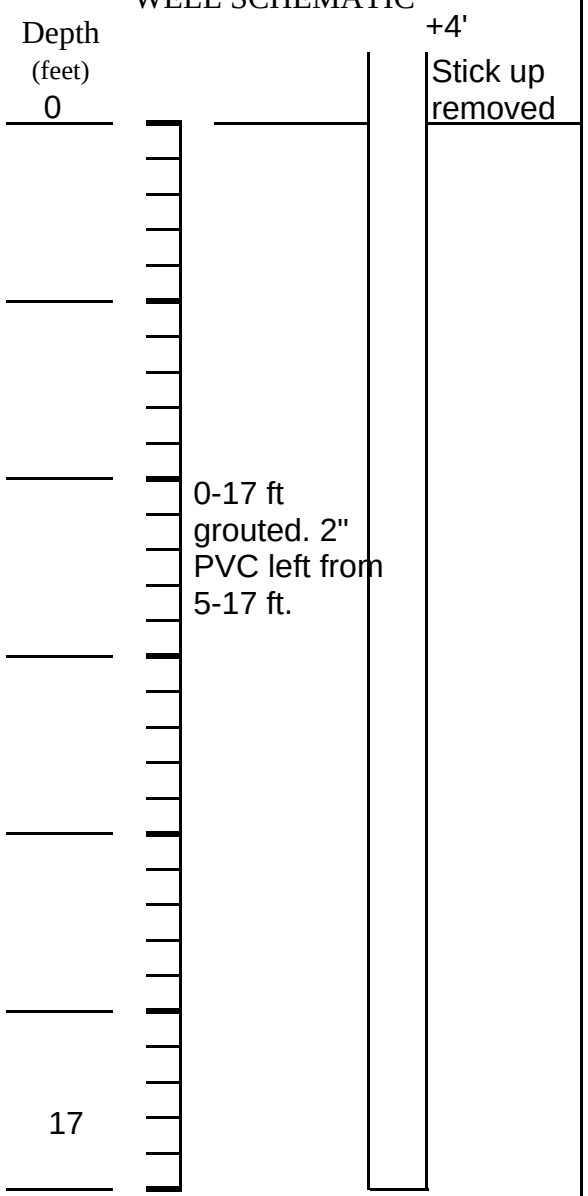
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-14S
Site Location: Southeast side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/9/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-17
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	5.5
Quantity of cement used (lbs.)	48.8
Cement type	Portland
Quantity of bentonite used (lbs.)	9.04
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	3
Volume of grout used (gal.)	3

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

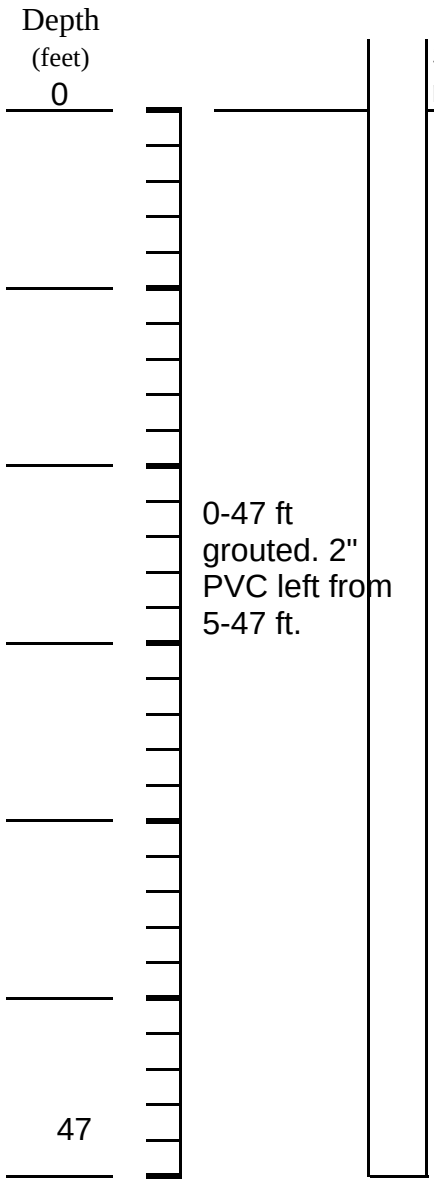
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-14I
Site Location: Southeast side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/8/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-47
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	14.2
Quantity of cement used (lbs.)	136.5
Cement type	Portland
Quantity of bentonite used (lbs.)	15
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	7.52
Volume of grout used (gal.)	7.52

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

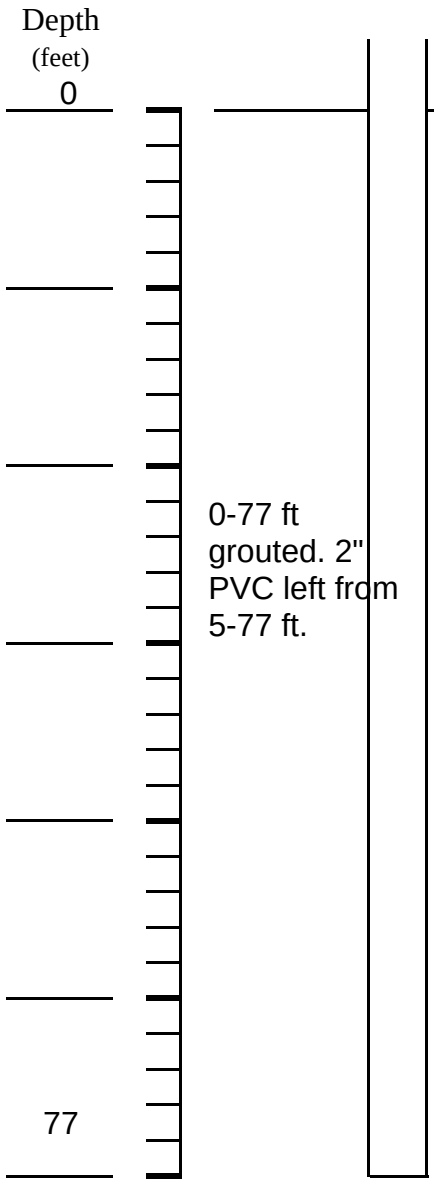
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-14D
Site Location: Southeast side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/9/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-77
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	23.3
Quantity of cement used (lbs.)	221.17
Cement type	Portland
Quantity of bentonite used (lbs.)	40
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	13
Volume of grout used (gal.)	13

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

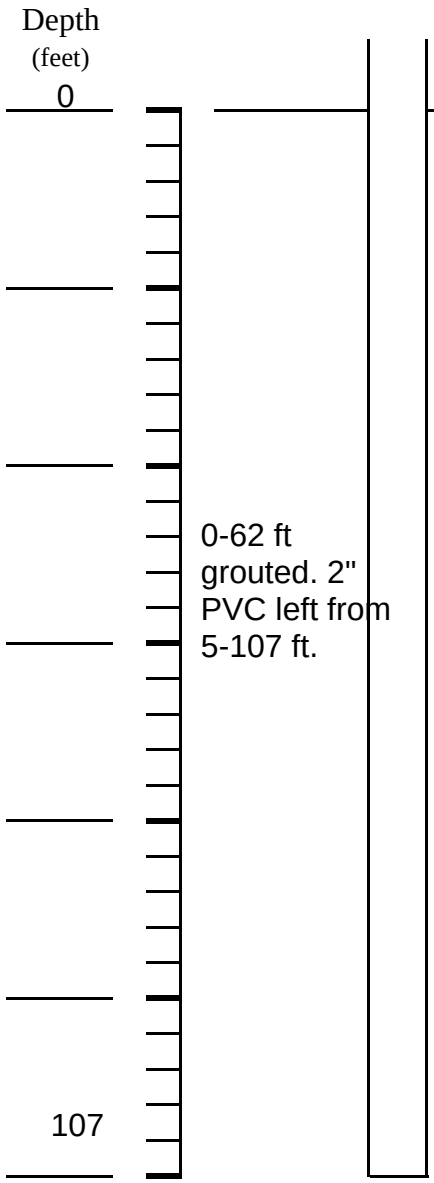
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RPMW-14D2
Site Location: Southeast side of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/8/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	2
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-62
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	18.73
Quantity of cement used (lbs.)	180.1
Cement type	Portland
Quantity of bentonite used (lbs.)	20
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	10

WELL SCHEMATIC*



COMMENTS:

Obstruction encountered at 62 ft-bgs, unable to pass, DEC approves grouting up from obstruction to ground surface.

No GW/NAPL impacts observed at depth.

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

Drilling Contractor

Department Representative

FIGURE 3

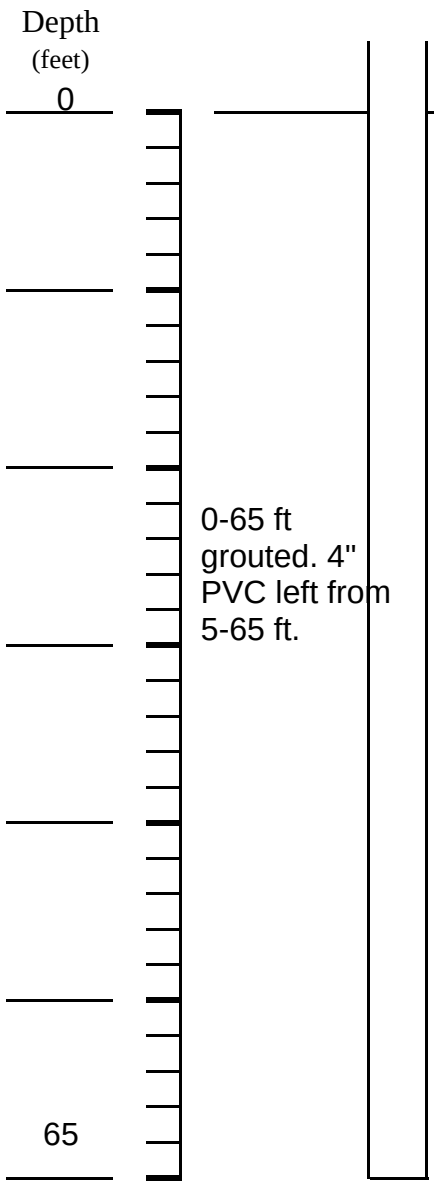
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RW-13B
Site Location: Central portion of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/8/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	4
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-65
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	53.5
Quantity of cement used (lbs.)	409.6
Cement type	Portland
Quantity of bentonite used (lbs.)	28
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	43
Volume of grout used (gal.)	43

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

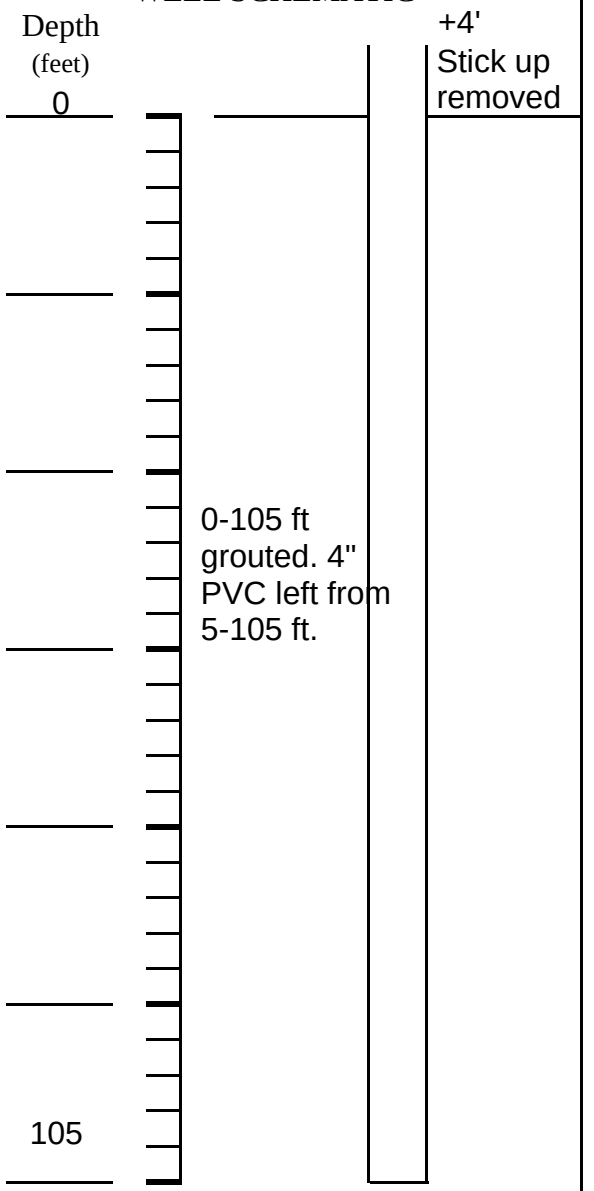
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RW-15B
Site Location: Central portion of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/8/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	4
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-105
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	86.4
Quantity of cement used (lbs.)	661.9
Cement type	Portland
Quantity of bentonite used (lbs.)	45.5
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	69
Volume of grout used (gal.)	69

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

FIGURE 3

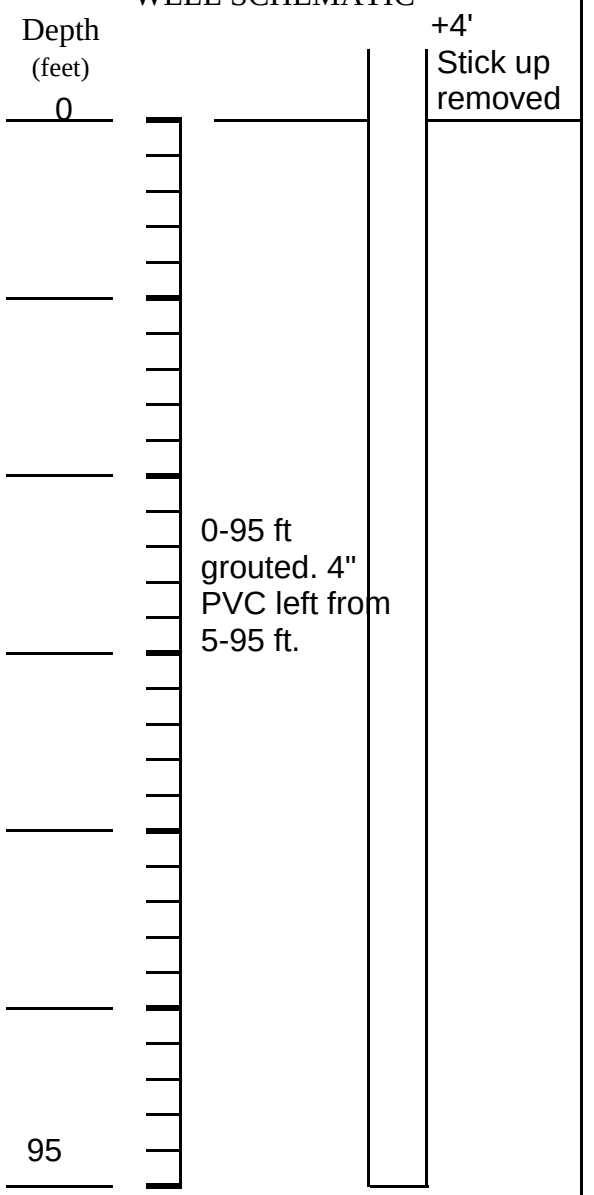
WELL DECOMMISSIONING RECORD

Site Name: Rockaway Park Former MGP Site No: 2-41-029	Well I.D.: RW-17B
Site Location: Central portion of Site	Driller: Todd Laderwager
Drilling Co.: Aquifer Drilling and Testing Inc. (ADT)	Inspector: Craig Hayes
	Date: 12/8/2021

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING : NO	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Handbar
Casing retrieved (feet)	5
Casing type/dia. (in)	4
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0-95
# of batches prepared	
For each batch record:	
Quantity of water used (gal.)	78.15
Quantity of cement used (lbs.)	598.7
Cement type	Portland
Quantity of bentonite used (lbs.)	41.2
Quantity of calcium chloride used (lbs.)	NA
Volume of grout prepared (gal.)	62
Volume of grout used (gal.)	62

WELL SCHEMATIC*



COMMENTS:

Tremie pipe inserted to the bottom of the well and grouted upwards to ground surface while removing inserted piping

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

Drilling Contractor

Department Representative

Appendix C

Well Installation Logs

GEI Consultants

GEI Consultants, Inc., P.C.
455 Winding Brook Drive
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP
CITY/STATE: Rockaway, New York
GEI PROJECT NUMBER: 1905774

BORING LOG

RPMW-14IR

GROUND SURFACE ELEVATION (FT): _____ **LOCATION:** _____
NORTHING: _____ **EASTING:** _____ **TOTAL DEPTH (FT):** 47.89
DRILLED BY: ADT / Dave Moon **DATUM VERT. / HORZ.:** _____
LOGGED BY: Craig Hayes **DATE START / END:** 12/10/2021 - 12/10/2021
DRILLING DETAILS: Geoprobe/Hollow Stem Auger
WATER LEVEL DEPTHS (FT): _____

DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN FT.	SAMPLE INFO: REC FT.	STRATA	SOIL / BEDROCK DESCRIPTION	WELL CONSTRUCTION DETAILS
0					No soil characteristics recorded during well installation.	
5						
10						
15						
20						
25						

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)
ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

ENVIRONMENTAL BORING LOG RP 2021 BORING INSTALLATION.GPJ GEI CONSULTANTS.GDT 1/27/22

GEI Consultants

GEI Consultants, Inc., P.C.
455 Winding Brook Drive
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP
CITY/STATE: Rockaway, New York
GEI PROJECT NUMBER: 1905774

BORING LOG

RPMW-14IR

DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN FT.	SAMPLE INFO: REC FT.	STRATA	SOIL / BEDROCK DESCRIPTION	WELL CONSTRUCTION DETAILS
25						
30						
35						
40						
45						

Bottom of borehole at 47.89 feet.

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)

ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

ENVIRONMENTAL BORING LOG RP 2021 BORING INSTALLATION.GPJ GEI CONSULTANTS.GDT 1/27/22

GEI Consultants

GEI Consultants, Inc., P.C.
455 Winding Brook Drive
Glastonbury, CT 06033
(860) 368-5300

CLIENT: National Grid
PROJECT: Rockaway Park Former MGP
CITY/STATE: Rockaway, New York
GEI PROJECT NUMBER: 1905774

BORING LOG

PAGE 1 of 1

RPMW-14SR

GROUND SURFACE ELEVATION (FT): _____ **LOCATION:** _____
NORTHING: _____ **EASTING:** _____ **TOTAL DEPTH (FT):** 19.66
DRILLED BY: ADT / Dave Moon **DATUM VERT. / HORZ.:** _____
LOGGED BY: Craig Hayes **DATE START / END:** 12/9/2021 - 12/9/2021
DRILLING DETAILS: Geoprobe/Hollow Stem Auger
WATER LEVEL DEPTHS (FT): _____

DEPTH FT.	SAMPLE INFO: TYPE and NO.	SAMPLE INFO: PEN FT.	SAMPLE INFO: REC FT.	STRATA	SOIL / BEDROCK DESCRIPTION	WELL CONSTRUCTION DETAILS
0					No soil characteristics recorded during well installation.	
5						
10						
15						
					Bottom of borehole at 19.66 feet.	

NOTES:

PEN = PENETRATION LENGTH OF SAMPLER
REC = RECOVERY LENGTH OF SAMPLE
PID = PHOTOIONIZATION DETECTOR READING (JAR HEADSPACE)

ppm = PARTS PER MILLION
IN. = INCHES
FT. = FEET

ENVIRONMENTAL BORING LOG RP 2021 BORING INSTALLATION.GPJ GEI CONSULTANTS.GDT 1/27/22

Dvirka and Bartilucci CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

Site Id: RPMW-14D

Date(s): 03/13/00 - 03/13/00

Datum: Mean Sea Level

Elevation: 3.65' | Measuring Point: 0.00'

Completed Depth: 78.00' | Total Depth: 78.00'

Location: Rockaway

Purpose: Monitoring Well, Deep

Logged By:

Drilling Method: 4.25" I.D. Hollow Stem Auger

Borehole Dia.: 6.00in

Contractor: Della Well & Pump

Screens:

type: Slotted size: 0.020in dia: 2.00in fm: 5.00' to: 15.00'
type: Slotted size: 0.020in dia: 2.00in fm: 35.00' to: 45.00'
type: Slotted size: 0.020in dia: 2.00in fm: 66.00' to: 76.00'

Remarks: Geologic material/sample/recovery data derived from boring RPSB-52

Depth (ft)	Recovery	Sample Interval	Vapor	Material Description
				No recovery (2-4')
				No recovery (4-6')
5			700 ppm 600 ppm 800 ppm 1500 ppm	Dark gray, fine-coarse SAND, loose, wet, heavy hydrocarbon odor
10			110 ppm 50.0 ppm 25.0 ppm	Dark gray-black, fine SAND, loose, wet, heavy hydrocarbon odor
15			30.0 ppm 85.0 ppm 75.0 ppm 15.0 ppm	Black, fine-coarse SAND, loose, wet, heavy hydrocarbon odor
20			20.0 ppm 6.5 ppm 15.0 ppm	Black, fine-med SAND, loose, wet, hydrocarbon odor
25			0.0 ppm	Grayish-black, fine-med SAND, med dense, wet

Graphic Log

Monitoring Well Screen Zones

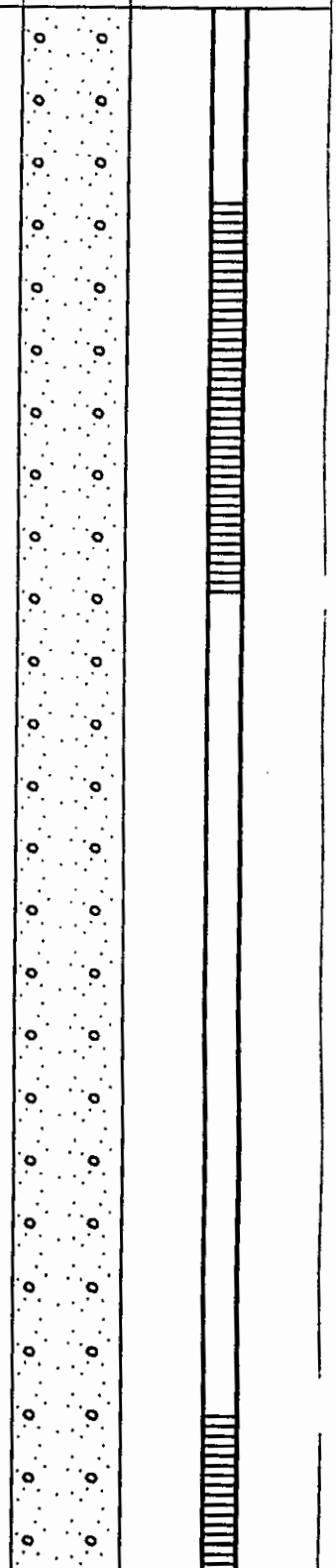
Screen interval depths illustrated for wells RPMW-14S, RPMW-14I and RPMW-14D

Consulting Firm: Dvirka & Bartilucci	Site Id: RPMW-14D
Location: Rockaway	Date(s): 03/13/00 - 03/13/00
Purpose: Monitoring Well, Deep	Total Depth: 78.00'

Depth (ft)	Recovery	Sample Interval	PID	Material Description
			0.0 ppm 1.4 ppm	Gray, fine, micaceous SAND, med dense, wet
3			0.0 ppm	Same as above
4				No recovery (40-42')
			0.0 ppm	Gray, fine SAND, med dense, wet
6				
9				
5				
8				
15				

Graphic Log

Monitoring Well Screen Zones



Screen interval depths illustrated for wells RPMW-14S, RPMW-14I and RPMW-14D

Consulting Firm: Dvirka & Bartilucci	Site Id: RPMW-14D
Location: Rockaway	Date(s): 03/13/00 - 03/13/00
Purpose: Monitoring Well, Deep	Total Depth: 78.00'

Depth (ft)	Recovery	Sample Interval	PID	Material Description	Graphic Log	Monitoring Well Screen Zones
75				Base of well boring - 78'		
80						
85						
90						
95						
100						
105						

Screen interval depths illustrated for wells RPMW-14S, RPMW-14I and RPMW-14D