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Hi John-

I got your message yesterday. Below is a link to last years annual report. Attached is the approved groundwater sampling criteria for the Site.

Please let me know if you have any questions or need any additional information.

 [Report.hwD100019811.2021_2022AnnualGMOMM_BayShore NY .pdf](#)

-Chris

GEI50

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Consulting
Engineers and
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2021/2022 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report Bay Shore/Brightwaters Former MGP Site

Town of Islip
NYSDEC Consent Index No. D1-0001-98-11

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December 2022



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Executive Summary

This report presents a summary of the 2021/2022 reporting period (Q3 2021 through Q2 2022) annual groundwater monitoring (GM) and operations, maintenance, and monitoring (OM&M) activities and associated results for the Bay Shore/Brightwaters former manufactured gas plant (MGP) site located in Bay Shore, Suffolk County, New York (the Site). This report has been prepared in accordance with the requirements of Section Title 6 of Division of Environmental Remediation (DER)-10, Technical Guidance for Site Investigation and Remediation, and the Order on Consent, Index No. D1-0001-98-11, between National Grid USA (National Grid) and the New York State Department of Environmental Conservation (NYSDEC).

The following narrative provides a summary of notable activities and associated monitoring and analytical results completed during this reporting period, with detailed descriptions provided in the following report sections, as follows: Section 1, Introduction (including a Site background and remedial history); Section 2, Remediation Systems; Section 3, Groundwater Level Monitoring and Well Condition Assessment Programs; Section 4, Groundwater Quality; and Section 5, Future Plans.

Remediation Systems

Multiple remediation systems currently operating at the Site include a dense non-aqueous phase liquid (DNAPL) recovery system, an ozone injection system and associated subsurface barrier wall, and seven oxygen injection systems. These systems have been successful at significantly reducing concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs) in groundwater at and downgradient of the Site.

NAPL Monitoring and Recovery: DNAPL and light non-aqueous phase liquid (LNAPL) monitoring are completed on a quarterly basis, while DNAPL recovery at well BBRW-02 is completed on a monthly basis. NAPL gauging results were consistent with recent historical thicknesses. In addition, over 28 gallons of DNAPL were recovered from well BBRW-02 during this reporting period.

OU-1 Ozone Groundwater Treatment System: Ozone injection system performance monitoring includes quarterly monitoring of BTEX and PAHs in OU-1 well clusters OZMW-23 and OZMW-24, located downgradient of the system and upgradient of the subsurface barrier wall. Although, elevated contaminant concentrations remain in OZMW-24I2 and OZMW-24D, concentrations remained within their historical ranges during this reporting period. Groundwater passing through the perforated section of the subsurface

barrier wall is further treated by the OU-1 Union Boulevard oxygen injection system, and downgradient OU-2 oxygen injection systems.

Oxygen Injection Systems: The oxygen injection systems located throughout OU-1, OU-2, and OU-3 were operational for approximately 85% of the time during this reporting period, continuing to significantly increase dissolved oxygen (DO) and oxidation reduction potential (ORP) in groundwater at OU-1, OU-2, and OU-3. Given the significant contaminant concentration reductions achieved since startup of the oxygen injection systems, three systems and a portion of a fourth system have been shut down.

Groundwater Level Monitoring and Well Condition Assessment Programs

Groundwater level monitoring is conducted annually at the Site to measure groundwater elevations and determine groundwater flow regimes. Groundwater elevations at the Site are shallow, generally between 2 and 12 feet below ground surface (bgs). Shallow and deep groundwater flow directions at and downgradient of the Site have been consistently generally toward the south/southeast, with generally similar groundwater elevations and flow directions.

The monitoring well network was generally observed to be accessible and in good condition during this reporting period and repairs are made on an as-needed basis. In addition, a total of 17 monitoring wells located in the OU-3 area were abandoned in October 2021, in accordance with the NYSDEC-approved work plan and NYSDEC's CP-43 monitoring well decommissioning policy document.

Groundwater Quality

Current and Historical Plume and Contaminant Concentrations: Remedial activities completed at the Site since Q1 2009, have significantly reduced contaminant concentrations resulting in the currently limited plume footprint.

The overall OU1/OU2 groundwater plumes (concentrations of total BTEX and total PAH equal to or greater than 100 micrograms per liter [$\mu\text{g/L}$]) have significantly reduced in size and concentration since remedial activities began in 2009. These significant reductions include the virtual elimination of shallow and intermediate impacts above 100 $\mu\text{g/L}$ in OU-2. Current maximum BTEX and PAH concentrations (well above 1,000 $\mu\text{g/L}$) are all located upgradient of the barrier wall capture zone or within the OU-1 ozone system treatment area. Concentrations above 100 $\mu\text{g/L}$ were generally only present in the shallow zone immediately downgradient of the barrier wall and the shallow/ intermediate zones immediately east of the barrier wall. Further downgradient, BTEX was not detected at concentrations above 100 $\mu\text{g/L}$ in any deep OU-2 well; though, deep PAH impacts remained periodically elevated extending to the Cooper Lane and 33 North Clinton Avenue oxygen injection systems, where additional remedial measures may be considered, as needed.

Shallow BTEX impacts in the OU-3 Brightwaters Yard have been reduced by up to two orders of magnitude by implementation of various remedial activities, and generally continue to decrease over time. The greatest total BTEX concentrations in the area (838 µg/L to 2,740 µg/L) were detected in shallow monitoring well OU3MW-08S, where a shallow peat unit exists in the vicinity of the well, potentially limiting the effectiveness of previous ORC-A injections in the area. However, contaminants in nearby well OU3MW-16S continue to exhibit near-historical low concentrations. Contaminant concentrations within the sheeting cells at the southern portion of the Brightwaters Yard varied widely, with highs generally near the upper end of historical concentration ranges concentrations in the deeper wells (up to 1,202 µg/L). Downgradient of the Brightwaters Yard, contaminant concentrations sporadically slightly above 100 µg/L were only observed during one sampling event (Q3 2021) during this reporting period in one shallow well located immediately south of the LIRR Right-of-Way (ROW) at 87 Community Road and one intermediate well, located immediately south of the LIRR ROW at 83 Community Road. These impacts will be treated by the Community Road oxygen injection system located further downgradient. BTEX and PAHs downgradient of the system were non-detect during all sample rounds during this reporting period.

Shallow and intermediate OU-4 wells continue to exhibit decreasing concentration trends; however, impacts above 100 µg/L are periodically detected in limited wells screened outside or below the vertical extent of the remedial excavation. Although access to several well clusters was granted during this reporting period, routine access issues persist at several wells south and west of the excavation area.

Analysis of Sulfate Concentrations: Sulfate concentrations have been declining in OU-1 wells since 2011 and the majority of OU-2 wells since 2017. Although, sulfate is still present in limited areas in the lower intermediate and deep zones at OU-1 and OU-2, concentrations have been below the Ambient Water Quality Standards (AWQS) for several years, including throughout this reporting period.

Future Plans

Overall contaminant concentrations at the Site have reduced significantly since Q1 2009 and have generally remained stable or have continued to reduce throughout this reporting period, with limited and minor exceptions. Based on the OM&M activities and analytical results discussed above, the following recommendations are presented below.

General Recommendations

- Based on the significant remedial progress achieved at the Site, the groundwater sampling rationale and system OM&M schedule are evaluated on a quarterly basis to ensure that these programs continue to operate in an effective and efficient manner.

- Continue to monitor Site-related impacts and associated remedial system effectiveness via quarterly and annual monitoring of the GM well network, including areas upgradient and downgradient of the on-site subsurface barrier wall and multiple treatment systems throughout the Site, in accordance with the 2012 NYSDEC-approved groundwater sampling criteria.
- Continue to evaluate the need for additional remedial measures based on contaminant concentrations within and/or downgradient of each OU and associated remedial system.
- Given that only one exceedance (out of approximately 20 wells per quarter) of the AWQS for sulfate has been detected over the past 3 years, sulfate monitoring at the Site should be discontinued, following NYSDEC approval.
- Continue well abandonment activities at targeted monitoring wells located throughout the Site, in accordance with the NYSDEC-approved work plan and NYSDEC's CP-43 monitoring well decommissioning policy document.
- Continue to complete minor well repair items, such as replacing broken well covers, etc., concurrent with site-wide groundwater sampling activities.

NAPL Gauging and Recovery

- Routine quarterly NAPL gauging should continue to be completed at targeted Site wells, as approved by the NYSDEC.
- Given that intermittent, but minimal thicknesses of DNAPL have recently been periodically detected in OU-4 monitoring well WCMW-05I, this well was redeveloped in Q4 2022. Redevelopment successfully removed the NAPL present in the well. The well will be monitored periodically to determine if additional NAPL accumulates.
- Routine monthly DNAPL recovery via the BBRW-02 DNAPL recovery system should continue to be completed.
- DNAPL recovery from wells in OU-1 which exhibit DNAPL thicknesses of greater than one-foot. Recovery from these began in early Q4 2022. An evaluation will be conducted to determine recovery schedules as warranted.

Treatment Systems

Ozone Groundwater Treatment System

- Continue routine operation and inspection of the ozone injection system, with routine maintenance completed per manufacturers' recommendations.

- Annual monitoring for ozone should continue at the Soil Vapor Extraction (SVE) manifold to ensure that excess ozone is not present within the vadose zone.

Oxygen Injection Systems

- Continue routine operation and bi-weekly/monthly system inspection of the oxygen injection systems, with maintenance completed per manufacturers' recommendations.
- Continue to evaluate groundwater data in the vicinity of the remaining active injection systems to optimize or shut down systems, as warranted and with NYSDEC-approval.
- Evaluate whether to abandon remaining injection wells in the southern line of the 60/66 North Clinton Avenue oxygen injection system, in accordance with the NYSDEC-approved work plan, as this treatment line was replaced.

Operable Unit-Specific Recommendations

Operable Unit 2

- As approved by the NYSDEC, post shut-down GM in the vicinity of the Manatuck Lane portion of the Montauk Highway oxygen injection system was completed during this reporting period. A letter requesting approval to abandon the Manatuck Lane portion of the Montauk Highway oxygen injection system will be submitted to the NYSDEC in the near future.
- Continue post-shutdown GM of the 9 North Clinton Avenue oxygen injection system following its August 13, 2021, shut down during this reporting period, as approved by the NYSDEC.
- As toluene was sporadically detected above the AWQS at several wells in the OU2MW-02 cluster, and was non-detect upgradient of this area, toluene concentrations will be closely monitored at this location during future sampling events.

Operable Unit 3

- Total BTEX concentrations south of the LIRR ROW at 87 Community Road will be closely monitored during future sample events.
- The elevated total BTEX concentrations identified at intermediate temporary wells TMW-01I2, TMW-02I2, and TMW-03I2, along with persistent contaminant concentrations in shallow wells OU3MW-08S and OU3MW-16S, will be closely monitored during future sampling events and additional remedial options considered.

Operable Unit 4

- Excavation of MGP impacts beneath the 22 Oak Street property are planned concurrent with future potential property redevelopment activities, as warranted.
- Given that the WCMW-04 well cluster, located on the LIRR ROW within the former cesspool area, has historically exhibited elevated contaminant concentrations, primarily PAHs in well WCMW-04I, further attempts to coordinate access with LIRR should be made to more consistently monitor contaminant concentrations in this area.
- Given that the trace measurements of DNAPL sporadically observed in monitoring well WCMW-05I are possibly attributable to a small amount of NAPL-impacted silt thought to exist at the bottom of the well, this material was removed from the well via redevelopment during Q4 2022. The well will be monitored periodically to determine if additional NAPL accumulates.

1. Introduction

This report presents a summary of the 2021/2022 reporting period (Q3 2021 through Q2 2022) annual GM and OM&M activities and associated results for the Bay Shore/Brightwaters former MGP site located in Bay Shore, Suffolk County, New York (the Site). This report has been prepared in accordance with the requirements of Section Title 6 of DER-10, Technical Guidance for Site Investigation and Remediation, and the Order on Consent, Index No. D1-0001-98-11, between National Grid and the NYSDEC.

Quarterly monitoring reports for the Site were prepared and submitted to the NYSDEC and distributed to the public from 2004 (the initial site remediation report) through Q2 2012. However, based on the significant and continued contaminant concentration reductions achieved through implementation of various remedial activities at the Site since Q1 2009, modification of the reporting frequency from quarterly to annually was approved by the NYSDEC in August 2012. Currently, interpretive Annual GM and OM&M Reports are submitted to the regulatory agencies annually, while quarterly GM and OM&M data continues to be evaluated and submitted to the regulatory agencies on a quarterly basis.

In Q4 2012, the NYSDEC also approved specific criteria for modification of the GM program and shutdown of remediation systems, which are summarized below:

- Monitoring wells which meet ambient groundwater quality standards for Class GA groundwater for individual BTEX and PAHs compounds for four consecutive quarters can be reduced to an annual sampling frequency.
- For compounds with standards less than the analytical detection limits, individual BTEX or PAH compound concentrations must be reduced below detection limits for four consecutive quarters before annual sampling can be instituted.
- Monitoring wells that meet the above criteria for two consecutive years of annual sampling can be removed from the sampling program.
- Quarterly sampling will resume at any well where total BTEX or total PAH concentrations exceed 50 µg/L.
- Select monitoring wells associated with the ozone or oxygen injection treatment systems will continue to be monitored at least quarterly to evaluate system performance.
- A proposal to shut down an oxygen system may be considered when the groundwater quality of monitoring wells located upgradient (as far as the next treatment system), and immediately downgradient of a given treatment system, meet the above criteria.

- Treatment systems will be placed back into operation if total BTEX or total PAH concentrations in either upgradient or downgradient wells exceed 50 µg/L during any of the four quarterly sampling events.

Since implementation of the above criteria and given the significant contaminant concentration reductions achieved at the Site since Q1 2009, multiple reductions to the long-term monitoring program sample list have been made, through quarterly evaluations. As such, the total number of wells in the groundwater sampling program has been reduced from a historical total of 553 to approximately 157 wells sampled during the current annual sampling event (Q2 2022).

A GM well tracking summary is provided in Appendix A for the quarterly and annual sampling events included in this report. Annual sampling events are conducted during the second quarter of each year.

The Site has been divided into four operable units (OUs) to manage investigation and remediation activities more effectively. The extents of the four OUs are shown on Figure 1. A description of GM results and groundwater quality trends for all OUs are included in this report to provide a comprehensive evaluation of groundwater quality throughout the overall Site. Groundwater trend analyses include assessments of the effectiveness of the remedial activities and associated groundwater quality in the Upper Glacial aquifer. For discussion purposes, the three aquifer zones referenced herein include:

- **Shallow Zone:** Includes wells with the top of the well screen located up to 10 feet bgs.
- **Intermediate Zone:** Includes wells with the top of the well screen located from 10 feet through up to 50 feet bgs.
- **Deep Zone:** Includes wells with the top of the well screen located at or deeper than 50 feet bgs.

It should be noted that well ID nomenclatures which indicate “S, I, or D” for shallow, intermediate, or deep, respectively, typically does, though does not necessarily, correspond to these aquifer zone descriptions.

GM and OM&M activities include groundwater and non-aqueous phase liquid (NAPL) monitoring and associated maintenance and monitoring of the various remedial systems operating at the Site. Routine well maintenance, including simple repairs identified during GM activities, is conducted quarterly, while major well repairs or replacements are performed on an as-needed basis.

The following narrative provides a background and remedial history for the Site, while the remaining report sections are organized as follows: Section 2, Remediation Systems;

Section 3, Groundwater Level Monitoring and Well Condition Assessment Programs;
 Section 4, Groundwater Quality; and Section 5, Future Plans.

1.1 Background and Remedial History

The former MGP began operations in the late 1880s and continued into the 1970s. Remaining above-ground MGP facilities were demolished in 1973. Various remedial investigations (RIs) have been completed at the Site. Site history and investigation results (through 2003) are presented in the Remedial Investigation Report (RIR) (Dvirka and Bartilucci Consulting Engineers [D&B] 2002) and the Final RIR (D&B, 2003).

A Final Remedial Action Plan (RAP) for Operable Unit 1 (OU-1) was approved by the NYSDEC on August 9, 2004. As depicted on Figure 2, and as summarized below, the remedy currently being implemented at OU-1 is detailed in a document entitled “Final Remedial Action Plan, Bay Shore Former MGP Site – Operable Unit-1, Bay Shore, New York” (Final RAP), prepared by GEI Consultants, Inc., P.C. (GEI), dated August 2004. In addition, several interim remedial measures (IRMs) have been completed at the Site since 1999, as depicted on Figure 2, and as summarized below.

1.1.1 Operable Unit 1 (OU-1)

OU-1 consists of the Bay Shore Site, formerly the main operations area of the MGP, as well as properties immediately south of the Site, which are currently owned by National Grid. Table 1a below summarizes OU-1 remedial activities.

Table 1a. Summary of OU-1 Remedial History

Date	OU-1 Remedial History	Comment
2004	In-Situ Chemical Oxidation (ISCO) Pilot Studies	Three pilot studies were conducted using Activated Persulfate, Modified Fenton’s Reagent, and Activated Fenton’s Reagent (GEI, 2005).
2006 to Present	DNAPL Recovery	A DNAPL recovery system was installed at BBRW-02 south of the LIRR as part of the Phase I Remedial Activities, per the Final RAP (GEI, 2004a), as documented in the DNAPL Pump Test Letter Report (KeySpan, 2006).
2006	Surfactant-Enhanced In-Situ Chemical Oxidation (S-ISCO) Pilot Study	A pilot study was conducted using surfactant to solubilize MGP-related impacts and sodium persulfate to oxidize such (GEI, 2007a).
February to April 2007	OU-1 Southern Cell Excavation	The southern cell excavation was included in Phase I of the OU-1 remedy, per the Final RAP, with results provided in the Phase I and Phase II Remedial Activities, OU-1 Bay Shore Former MGP site, Final Completion Report (Paulus, Sokolowski and Sartor Engineering, PC [PS&S], 2009).
April 2007 to May 2008	Subsurface Barrier Wall Installation	The barrier was installed as part of Phase I of the OU-1 remedy, per the Final RAP, as documented in the Final Completion Report (PS&S, 2009).
February 2008	Oxygen Injection System	An oxygen injection system was installed along the downgradient edge of OU-1 to treat groundwater at the perforated portion of the barrier wall until startup of the full-scale groundwater treatment system was completed (KeySpan, 2007). Initially installed to

Date	OU-1 Remedial History	Comment
		provide temporary treatment during the construction/startup of the ozone injection system. NYSDEC requested the system remain online following the installation.
August 2007 to August 2008	OU-1 Excavation North of the LIRR	The excavation north of the LIRR in OU-1 was performed as Phase II of the OU-1 remedy, per the Final RAP. Final construction details are provided in the Final Completion Report (PS&S, 2009).
October 2009	Ozone Groundwater Treatment System	Installation of the ozone injection groundwater treatment system was performed as Phase IA of the OU-1 remedy (GEI, 2009b), per the Final RAP (GEI, 2004a). The treatment building houses the equipment used to generate the ozone gas from fresh air, SVE equipment, carbon vessels, and an ozone destruction unit
March to April 2009	66 North Clinton Avenue Excavation	Shallow MGP-impacted soil located outside of the barrier wall in the western fringe area was removed to approximately 10 feet bgs, as part of Phase IV of the OU-1 remedy (GEI, 2010a), per the Final RAP (GEI, 2004a).
January 2010	60/66 North Clinton Avenue Oxygen Injection System	The system was installed as part of Phase IV of the OU-1 remedy to treat groundwater west of the barrier wall (GEI, 2010a).
June 2011	OU-1 Oxygen Injection System Extension	The OU-1 Union Boulevard system was extended in accordance with the OU-2 Remedial Design Document (GEI, 2009a) to treat impacted groundwater east of the subsurface barrier wall.
August-2011	TarGOST® Study	This investigation was performed to delineate potential recoverable NAPL in OU-1, North and South of the LIRR in order to locate additional recovery wells.
October 2011	Recovery Well Installations (19 temporary & 1 permanent)	These wells were installed following a TarGOST® study. Following DNAPL gauging, bailing and recovery rate testing, one additional permanent recovery well installed.
February 2012	Temporary Recovery Well Abandonment and Recovery Well Installation	The temporary recovery wells with no measurable level of NAPL were abandoned and one permanent recovery well was installed.
October 2013	OU-1 North Oxygen Injection System Installation	The system was installed to treat impacted groundwater in the eastern portion of OU-1.
October 2013	Oxygen Injection System Modifications	The Union Boulevard oxygen injection system was modified to treat remaining impacts. The 60/66 North Clinton Avenue oxygen injection system was relocated to the northern property boundary to facilitate potential property redevelopment. The southern portion of the treatment line was kept active to ensure no gaps in treatment. The system was also modified to treat groundwater impacts inside the western portion of the barrier wall.
June 2015	Oxygen Injection System Modifications	The Union Boulevard oxygen injection system was modified to include treatment upgradient and downgradient of the barrier wall. Additional deep injection wells were also installed to treat deep impacts. Construction was completed in July 2015.
September 2019	Soil Vapor Extraction (SVE) System	Due to low contaminant concentrations, the SVE system associated with the ozone injection system was shut down on September 25, 2019, per the NYSDEC-approved shutdown plan (GEI 2018). The system is maintained in operational condition should contaminant concentrations warrant re-start. SVE manifold monitoring is completed annually to confirm no excess ozone in subsurface.

1.1.2 Operable Unit 2 (OU-2)

OU-2 consists of the groundwater plume area extending downgradient (south/southeast) from OU-1. The NYSDEC issued a Voluntary Cleanup Program Decision Document for OU-2 in

July 2008, which specified the installation of a minimum of three oxygen injection systems. Table 1b below summarizes OU-2 remedial activities.

Table 1b. Summary of OU-2 Remedial Activities

Date	OU-2 Remedial Activity	Comment
December-2005	Oxygen Injection IRM	The Montauk Highway oxygen injection system, two injection lines along Montauk Highway and the intersection of Manatuck Lane and Garner Lane, treats groundwater prior to discharge to Lawrence Creek (GEI, 2006).
May to July 2007	Hydrologic Study	Investigation to further evaluate groundwater nearby the Montauk Highway oxygen injection system and to validate contaminant reductions in the vicinity of the Montauk Highway and Manatuck Lane treatment lines (GEI, 2007b).
January to November 2009	Installation and operation of the 9 North Clinton Avenue, 33 North Clinton Avenue including the Cooper Lane portion of the system, 34 North Clinton Avenue and Plume Tail oxygen injection systems.	In accordance with the Voluntary Clean-up Program Decision Document (NYSDEC, 2008) and the OU-2 Remedial Design Document (GEI, 2009a), three additional oxygen injection systems were installed within the OU-2 plume (GEI, 2010d). The Plume Tail system was installed to treat remaining impacts prior to discharge into the surface water body.
June 2011	Additional Oxygen Injection System Installation (29 Community Road Oxygen Injection System)	The 29 Community Road oxygen injection system treats impacted groundwater along the western extents of OU-2 and was installed per an addendum to the OU-2 Remedial Design Document (GEI, 2009a).
October 2013	Oxygen Injection System Modifications	33 North Clinton Avenue and Montauk Highway oxygen injection systems were modified to target remaining impacts.
November 2013	Oxygen Release Compound - Advanced (ORC-A) Injection Program	A targeted ORC-A injection program was conducted to treat impacts downgradient of the subsurface barrier wall.
March 2015	Oxygen Injection System Shutdown (29 Community Road and Plume Tail)	The 29 Community Road and Plume Tail oxygen injection systems were shut down on March 26, 2015, per NYSDEC-approved shutdown criteria, and were removed in June 2019 and June 2017, respectively. The injection wells/lines and associated monitoring wells were abandoned in June 2019.
May 2019	Montauk Highway Oxygen Injection System – Manatuck Lane Line	The Manatuck Lane portion of the Montauk Highway oxygen injection system was shut down in May 2019, per NYSDEC-approval.
August 2021	9 North Clinton Avenue Oxygen Injection System	The 9 North Clinton Avenue oxygen injection system was shut down in August 2021, per NYSDEC approval. Post-shutdown monitoring in the vicinity of the system is ongoing.

1.1.3 Operable Unit 3 (OU-3)

OU-3 consists of the Brightwaters Yard (currently owned by National Grid) and the groundwater plume that extends south/southeast from the Brightwaters Yard into the LIRR ROW. Table 1c below summarizes OU-3 remedial activities.

Table 1c. Summary of OU-3 Remedial Activities

Date	OU-3 Remedial Activity	Comment
2000	Groundwater Treatment IRM	An oxygen injection system was installed at the intersection of Union Boulevard and Lanier Lane to reduce MGP-related contaminants in groundwater prior to discharge into O-Co-Nee Pond (Foster Wheeler Environmental Corporation [FW], 2000).
May 2001, September 2001 to October 2004	ISCO IRMs	In-Situ Oxidative Technologies, Inc. (ISOTEC) completed three rounds of ISCO at the Brightwaters Yard source area (FW, 2000).
May to July 2004	Excavation IRM	Approximately 1,500 tons of contaminated soil was excavated (PS&S, 2005).
2004	Groundwater Treatment IRM	The Brightwaters Yard oxygen injection system was installed to reduce MGP-related contaminants in groundwater leaving the OU-3 site boundary (PS&S, 2004).
2008	Storm Sewer Rehabilitation IRM	Sections of the storm water collection network within OU-3 were rehabilitated, including the replacement of catch basins and cured-in-place lining of drainage piping (GEI, 2010b)
July 2009	Brightwaters Yard Oxygen Injection System Abandonment	The Brightwaters Yard system was abandoned in support of the LIRR Excavation IRM (National Grid, 2010).
Phase I completed February 2010, Phase II completed July 2010, Phase III completed September 2010	LIRR Excavation/Temporary Track Relocation IRM	Source material was removed from the OU-3 Brightwaters Yard and under the adjacent LIRR property (GEI, 2012c).
April 2010	Community Road Oxygen Injection Line	This treatment line was installed to replace the former Union Boulevard and Brightwaters Yard systems (GEI, 2010a). Line is supplied by the 60/66 North Clinton Avenue oxygen injection system located at OU-1.
July 2010	OU-3 Union Boulevard Oxygen Injection System Abandonment	The Union Boulevard system was abandoned to limit remedial equipment within the community and replaced with the Community Road oxygen injection line (National Grid, 2010).
March 2012	OU-3 Community Road Oxygen Injection Line Reconfiguration	This treatment line was reconfigured to optimize the treatment of impacted groundwater in OU-3 (National Grid, 2011).
March 2013/August 2013/January 2015	ORC-Advanced Injection Program	A targeted ORC-A injection program was conducted to treat downgradient impacts (National Grid, 2013).
September 2013	87 Community Road Oxygen Injection System Installation	Installed to treat impacted groundwater in OU-3, south of the LIRR ROW. (GEI, 2016)
July 2015	87 Community Road Oxygen Injection System Expansion	Additional injection wells within the LIRR sheeting cells added to the 87 Community Road oxygen injection system (GEI, 2016). Monitoring wells OU3MW-22I, OU3MW-22I2, OU3MW-23I, OU3MW-23I2, OU3MW-24I, and OU3MW-24I2 converted to injection wells. Additional injection wells (IP-16A, IP-16B, IP-18A, IP-18B, IP-20A, and IP-20B) installed to treat the upgradient/central portion of the three sheeting cells.

Date	OU-3 Remedial Activity	Comment
December 2019	ORC-Advanced Injection Program	ORC-A injection program conducted in downgradient property boundary of the Brightwaters Yard and within the northern LIRR ROW sheeting cells (National Grid 2020). Six temporary wells installed in northern sheeting cells and the southern Brightwaters Yard. Temporary wells TMW-011/I2 through TMW-031/I2 installed in the three westernmost northern cells to assess remaining impacts and impacts at OU3MW-09I. Temporary wells screened from 12 to 17 ft bgs and at the bottom of the sheets from 25 to 30 ft bgs.

1.1.4 Operable Unit 4 (OU-4)

OU-4 consists of a former cesspool area, former pond area, and the headwaters of Watchogue Creek/Crum's Brook, located approximately 400 feet east of the Bay Shore Site. Table 1d below summarizes OU-4 remedial activities.

Table 1d. Summary of OU-4 Remedial Activities

Date	OU-4 Remedial Activity	Comment
2000	Restoration of Watchogue Creek/Crum's Brook	Sediments were removed and the channel was restored (FW, 2002).
November 2005	Cesspool Excavation IRM	The former cesspool shallow impacted soils (vadose zone soils) were removed and treated off-site (GEI, 2010c).
April to December 2009	S-ISCO IRM	S-ISCO was implemented, per the NYSDEC-approved OU-4 Cesspool Area S-ISCO Work Plan (VeruTEK, 2008) and associated addenda (GEI, 2013)
April to August 2011	Cesspool Area and Pond Area Excavation IRM	OU-4 Upgradient Excavation completed in Q1 2011, monitoring well abandonment and the Cesspool Area shallow excavation (approximately 10 feet bgs) completed in July 2011, and pond area excavation completed in August 2011 (GEI, 2013).

2. Remediation Systems

Multiple remediation systems currently operating at the Site include a DNAPL recovery system, an ozone injection system and associated subsurface barrier wall, and seven oxygen injection systems. A description of each system, monitoring activities, and operational data for this reporting period are summarized below. Locations of the treatment systems, subsurface barrier wall, and monitoring wells are provided on Figure 1, while a summary remedial system progress, including remedial systems that were shut down after achieving remedial goals, is provided on Figure 2.

2.1 NAPL Monitoring and Recovery

2.1.1 Program Scope and Purpose

DNAPL and LNAPL monitoring are currently completed on a quarterly basis. LNAPL thickness measurements are collected with an oil/water interface probe, while DNAPL thickness measurements are collected by measuring the “smear” of DNAPL on a dedicated weighted measuring tape.

The BBRW-02 DNAPL recovery system, which is currently operated on a monthly basis, consists of a Blackhawk Electric Anchor Piston Pump which pumps DNAPL from BBRW-02 and discharges it to a 55-gallon steel drum. The DNAPL recovery system is operated manually to maximize DNAPL recovery, while minimizing the generation of water. The recovery schedule is evaluated annually and is adjusted, as needed.

2.1.2 NAPL Monitoring Data

2.1.2.1 DNAPL Monitoring

DNAPL thicknesses identified during this and the previous reporting period are provided below in Table 2a. DNAPL has historically been observed in OU-1 wells. DNAPL was also detected during sampling of OU-4 monitoring well WCMW-05I during the previous reporting period. This well has been added to the DNAPL monitoring list below. It should be noted that several DNAPL gauging results are not available from the Q4 2021 gauging event, as results from the monitoring event were inadvertently left off the gauging list.

Table 2a. Summary of Measured DNAPL Thicknesses

Well ID	Screen Interval	Average DNAPL Thickness (feet)							
		Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
BBRW-01R	30-60	0.62	0.7	0.68	0.65*	0.65	0.33	0.65	0.32
BBRW-02	58.2-78.2	7.76	6.8	6.83	5.98	6.12	4.04	5.77	5.55
BBRW-05I	-	-	-	-	0.20	NO	NG	NO	NO
BBRW-05D	64-74	NO	NO	NO	NO*	0.45	NG	trace	0.09
BBRW-06	25-55	1.54	1.65	1.59	1.7	1.53	0.85	1.68	1.76
BBRW-08	65-75	2.14	2.1	2.18	1.85*	1.85	2.05	2.13	2.45
BBRW-09	66-76	NO	NO	NO	NO	NO	NO	NO	NO
BBMW-22D	64-74	4.61	4.41	4.58	4.11*	4.11	NG	4.25	4.60
BBMW-34I2	40-45	1.28	1.21	1.32	1.33	1.23	NG	1.11	2.09
BBMW-38I	25-30	1.06	1.13	1.35	1.27	1.80	NG	0.37	0.76
BBMW-38I2	40-45	0.96	0.97	0.97	1.47	0.80	NG	0.68	1.02
OZMW-21S	20-30	NO	NO	NO	NO	NO	NG	NO	NO
OZMW-21I	20-30	1.94	1.96	1.98	2.05	1.91	1.69	1.80	1.70
OZMW-21D	55-60	2.8	2.84	2.87	2.97	2.90	2.76	3.48	2.95
TG-29I2	55-65	NO	NO	NO	NO	NO	NO	NO	NO
TG-32I2	40-50	4.51	4.4	4.53	4.43	4.48	4.10	3.95	4.70
TG-32D	65-75	1.48	1.61	1.50	1.69*	3.69	1.32	1.56	1.31
TG-44I2	55-60	2.97	3.07	2.98	3.52*	3.52	3.02	3.27	3.32

Notes:

DNAPL historically observed at abandoned well BBRW-01. Replacement well BBRW-01R installed adjacent to BBRW-01.
 BBMW-22D is located within 15 feet of BBRW-02 and is influenced by pumping operations at BBRW-02.
 DNAPL thickness measured pre-recovery at BBRW-02.

“: Measurement collected on 10/30/2022.

*: Value from Q3 2021.

NO: Not observed

NG: Not gauged

NA: Not available

DNAPL thicknesses have remained generally consistent over the past several years.

2.1.2.2 LNAPL Monitoring

LNAPL has historically not been observed in OU-1 area wells since approximately 2015, with the exception of historical sporadic sheens and minor thickness detections at well OZMW-21S prior to Q2 2022, as identified below in Table 2b. The LNAPL thickness measurement at well OZMW-21S (0.07 feet) was remeasured in Q4 2022 due to a probe malfunction during the Q2 2022 gauging round.

Table 2b. Summary of Measured LNAPL Thickness

Well ID	Screen Interval	Average LNAPL Thickness (feet)							
		Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
BBMW-34I	25-30	NO	NO	NO	NO	NO	NA	NO	NO
BBMW-38I	25-30	NO	NO	NO	NO	NO	NG	NO	NO
BBMW-38D	65-70	NO	NO	NO	NO	NO	NG	NO	NO
OZMW-21S	15-May	0.21	sheen	sheen	0.1*	0.10	NG	NO	0.07"
OZMW-25I	20-30	NO	NO	NO	NO	NO	NO	NO	NO

Notes:

*: Measurement collected on 10/30/2022 due to a probe malfunction during the initial gauging round.

NO: Not observed

NG: Not gauged

NA: Not available

2.1.3 DNAPL Recovery Data

2.1.3.1 DNAPL Recovery

Over 701 gallons of DNAPL have been recovered from BBRW-02 since the beginning of recovery operations, as summarized below in Table 2c.

Table 2c. Summary of DNAPL Removal at Recovery Well BBRW-02

Time Period		Approximate DNAPL Thickness (feet)		Approximate DNAPL Removed
		Initial	Final	(Gallons)
Q3 2021	07/12/2021	7.9	5.1	4.13
	07/20/2021	6.0	4.8	1.69
	08/06/2021	6.6	4.6	3.00
	09/16/2021	4.9	4.1	1.28
Q4 2021	11/19/2021	7.1	7.1	0.00
	12/13/2021	6.6	4.4	3.19
Q1 2022	01/21/2022	6.6	4.7	2.75
	02/18/2022	5.3	4.5	1.04
	03/17/2022	5.4	4.4	1.60
Q2 2022	04/20/2022	6.0	4.1	2.82
	05/31/2022	6.2	3.9	3.32
	06/15/2022	6.4	4.1	3.38
Totals	Q3 2021 – Q2 2022	-	-	28.18
	To Date (Since Q1 2006)	-	-	701.46

Notes:

Total volume and minimum volume removed is calculated by multiplying the thickness by the cross-sectional area of the well.

Historical DNAPL recovery trends, as well as initial and final DNAPL thicknesses (measured prior to and post-recovery, respectively), are shown on Figure 3.

DNAPL thicknesses prior to recovery ranged from approximately 4.9 and 7.9 feet during this reporting period. DNAPL thickness results have varied in recent monitoring events; however, an overall decreasing trend has been observed since recovery activities were initiated in Q1 2006.

Over 28 gallons of DNAPL were recovered during this reporting period, averaging over 7 gallons per quarter. The total NAPL volume recovered during this reporting period represents an increase over the previous reporting period volume of approximately 20 gallons.

Recovery of DNAPL from additional wells with measured thicknesses greater than 1 foot (see Table 2a above) began with submersible pumps in early Q4 2022. DNAPL recovery rates for these wells will be monitored and recovery schedules will be established, as appropriate. These details and recovery totals will be provided in the following Annual GM and OM&M Report.

2.2 OU-1 Ozone Groundwater Treatment System

2.2.1 Program Scope and Purpose

The OU-1 ozone injection system operating at the downgradient edge of OU-1 reduces concentrations of dissolved-phase contaminants through ISCO prior to passing through a perforated section of the subsurface barrier wall, located at the downgradient boundary of OU-1.

The barrier wall extends through the Upper Glacial aquifer to approximately 70 feet bgs. A 190-foot section of the wall located parallel to Union Boulevard is perforated from approximately 10 to 40 feet bgs. This perforated zone creates a “window” where groundwater treated via the ozone injection system is discharged from OU-1 to OU-2. The ozone treatment area consists of 63 injection wells screened at 2-foot intervals between 27 and 50 feet bgs, with 11 horizontal SVE laterals. The SVE system formerly operating in this area was shut down due to low contaminant concentrations with NYSDEC approval; however, the SVE system remains in operational condition should contaminant concentrations warrant re-start.

2.2.2 Routine Ozone Injection System OM&M Activities

Routine ozone injection system OM&M activities are summarized below in Table 2d. All monitoring events were completed as planned during this reporting period, excluding the SVE system monitoring, which was completed following the end of this reporting period.

Table 2d. Routine Ozone Injection System OM&M Activities

Activity	Task Description	Frequency	Location of Results
Ozone System Monitoring	Routine inspection and maintenance of system components, monitoring of operational parameters, and recording/adjusting injected ozone concentrations.	Weekly	Details are recorded on field logs (not provided herein)
SVE System Monitoring	Monitoring of SVE manifold to confirm no excess ozone in subsurface. Maintaining the SVE system in "ready" condition for re-start, if needed.	Annually	Details are recorded on field logs (not provided herein)
System Performance Monitoring	Monitoring downgradient BTEX and PAHs in groundwater at well clusters OZMW-23 and OZMW-24.	Quarterly	Figure 4, Section 4, Table 4-1, and Table 4-2

2.2.3 Ozone Injection System OM&M Data

2.2.3.1 Performance Monitoring and Contaminant Concentration Trends

Ozone injection system performance monitoring is completed via quarterly monitoring of BTEX and PAHs in wells located within the treatment zone and downgradient of the system at wells located upgradient and immediately downgradient of the subsurface barrier wall. As a result of the ozone injection system operation, total BTEX and PAH concentration trends have reduced significantly over time in the shallow and intermediate zones at these well clusters (Figure 4).

Total BTEX concentrations in wells in OZMW-24I2 and OZMW-24D were elevated but were within the lower end of their historical range during this reporting period and were lower than corresponding total PAH concentrations. Although, elevated total PAH concentrations remain in OZMW-24I2 and OZMW-24D, concentrations remained within their historical ranges during this reporting period. Groundwater passing through the perforated section of the subsurface barrier wall is further treated by the OU-1 Union Boulevard oxygen injection system, further discussed below in Section 2.3. Groundwater quality trends are discussed further in Section 4.

2.2.3.2 Ozone Injection System

The Train 2 portion of the ozone injection system remained down throughout this reporting period due to a booster pump failure and an extended COVID-related lead-time for a replacement pump. The booster pump was replaced, and the Train 2 portion of the ozone injection system was restarted in early Q3 2022, which is described below.

The ozone injection system (Train 1) was operational for 270 out of 365 days (74%) during this reporting period, as follows:

- **Q3 2021:** The Train 1 portion of the system was shut down from August 10 through September 9, 2021 (approximately 30 of 92 days) due to failure and repair of the desiccant dryer, replacement of the dew point sensor, and biannual maintenance.

- **Q4 2021:** The Train 1 portion of the system was operational for all 92 days. Although not requiring significant downtime, biannual maintenance was completed during Q4 2021.
- **Q1 and Q2 2022:** The Train 1 portion of the system was shut down from February 18 through April 23, 2022 (approximately 65 of 181 days) due to failure and repair of the booster pump seals. Timing of repairs were affected by Covid-related supply chain issues.

The ozone injection system was designed to inject an air-ozone mixture of approximately 1.5% ozone and 98.5% air. The ozone injection system injected ozone at a total average rate of 1.52% during this reporting period, with quarterly averages ranging from approximately 1.05% (Q1 2022) to approximately 1.80% (Q4 2021). The ozone injection system injected an average of approximately 11 pounds of ozone per day during operational periods.

2.2.3.3 SVE System Monitoring

Annual monitoring of the SVE manifold effluent port is typically conducted during Q4 of each year, concurrent with annual system maintenance activities, to monitor ozone concentrations within the vadose zone in the area of the SVE manifold.

The Q4 2022 ozone sampling event was inadvertently not completed during this reporting period. However, ozone monitoring was conducted following the completion of the current reporting period and ozone was non-detect in the SVE manifold effluent port at that time, consistent with historical results.

2.3 Oxygen Injection Systems

2.3.1 Program Scope and Purpose

The oxygen injection systems located throughout OU-1, OU-2, and OU-3 generate and inject oxygen into the subsurface to create an aerobic environment, thus facilitating biodegradation of dissolved-phase contaminants. Given the significant contaminant concentration reductions achieved since startup of the oxygen injection systems, multiple systems and/or portions thereof have been shut down, as summarized in Section 1. Most recently, the 9 North Clinton Avenue system was shut down in August 2021, and post shut-down monitoring has commenced.

A summary of the oxygen injection systems currently operating at the Site during this reporting period is presented below in Table 2e.

Table 2e. Current Operating Oxygen Injection Systems

Operable Unit	Oxygen Injection System Designation	Operation Start Date
OU-1	OU-1 Union Boulevard System	Feb. 2008
	60/66 N. Clinton Ave System	Jan. 27, 2010
	OU-1 Union Boulevard Extension	Jun. 16, 2011
	OU-1 North System	Oct. 28, 2013
OU-2	Montauk Highway Oxygen Injection System*	Dec. 28, 2005
	34 N. Clinton Ave Oxygen Injection System	Jan. 20, 2009
	33 N. Clinton Ave. Oxygen Injection System	Mar. 31, 2009
	Cooper Lane Oxygen Injection Line (Extension of 33 N. Clinton System)	Nov. 16, 2009
	33 N. Clinton Ave/Cooper Lane Oxygen Injection Line	Mar. 31, 2009/ Nov. 16, 2009
OU-3	Community Road Oxygen Injection Line	Apr. 6, 2010
	87 Community Road	Sep. 26, 2013

Notes:

*: Manatuck portion of the system was shut down on May 10, 2019.

2.3.2 Routine Oxygen Injection System OM&M Activities

The oxygen injection system monitoring activities are summarized below in Table 2f.

Table 2f. Routine Oxygen Injection System OM&M Activities

Current Activity	Description	Frequency	Location of Results
Oxygen System Monitoring	Routine inspection and maintenance of system components, monitoring of operational parameters, and recording/adjusting injection flow rates.	Monthly	Appendix B, C, and D
	Monitoring oxygen purity.	Monthly	Appendix B, C, and D
System Performance Monitoring	Monitoring upgradient and downgradient BTEX and PAHs in groundwater.	Quarterly	Section 4, Figures 4, 5, and 6
	Monitoring of groundwater chemistry parameters.	Quarterly	Appendix E

2.3.3 Oxygen Injection System OM&M Data

2.3.3.1 System Operational Data

Overall, the oxygen injection systems were operational approximately 85% of the time during this reporting period. Downtime during this reporting period resulted from power outages, scheduled maintenance, and mechanical issues (primarily issues with a refrigerated dryer failure, compressor malfunctions, booster pump malfunctions), with the majority occurring at the OU-1 Union Boulevard and Extension and the 60/66 North Clinton Avenue and Community Road systems. Low oxygen percentages were also observed at the 33 North Clinton and the Garner Lane oxygen injection systems. These systems are operational, but at a reduced capacity.

The low O₂ percentage is likely due to improper valve operation on the oxygen generator or spent sieve material. GEI is currently troubleshooting these problems.

Approximately 358,533 lbs of oxygen were injected at OU-1, OU-2, and OU-3 during this reporting period. Calculated oxygen weights and system operational data are summarized below in Table 2g. It should be noted that the 9 North Clinton Ave, system was shut down with NYSDEC approval in August 2021 and, as it was operating normally up to that point, its operational time for this reporting period is calculated as 100% below.

Table 2g. Oxygen Injection System Operational Data

Operable Unit	Oxygen Injection System/Treatment Line	System % Operational Time (Q3 2021-Q2 2022)	Oxygen Injected (pounds)					Total Oxygen Injected Through Operational Period (Pounds)
			Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2021 - Q2 2022	
OU-1	OU-1 Union Boulevard and Extension	64.9%	3,397	10,314	10,410	14,823	38,944	797,966
	60/66 N. Clinton (O ₂ to OU-1)	67.1%	0	10,241	13,028	13,370	36,639	397,382
	OU-1 North	77.3%	10,527	6,156	7,680	5,833	30,196	332,163
OU-2	Garner Lane	100.0%	9,125	7,250	4,173	4,240	24,788	1,320,281
	9 North Clinton	100%	3,768	0	0	0	3,768	626,122
	34 N. Clinton	100.0%	21,969	12,626	11,457	12,519	58,570	881,888
	33 N. Clinton/Cooper Lane	94.8%	19,233	24,524	24,701	5,998	74,456	937,090
OU-3	Community Road (60/66 N. Clinton [O ₂ to OU-3])	67.1%	0	12,499	15,168	16,405	44,072	735,200
	87 Community Road	93.4%	9,423	12,542	12,143	12,993	47,101	436,969
Totals		85.0%	77,441	96,151	98,761	86,180	358,533	6,465,060

Calculated oxygen weights for the OU-1, OU-2, and OU-3 systems are provided in Appendices B, C, and D, respectively.

2.3.3.2 Performance Monitoring and Groundwater Parameters

As summarized below in Table 2h and Table 2i, operation of the oxygen injection systems has significantly increased both DO and ORP in groundwater in the OU-1, OU-2, and OU-3 areas.

Table 2h. Summary of DO Concentrations

Operable Unit	Groundwater Interval (feet)	DO Concentrations (mg/L)			Downgradient Monitoring Wells
		Baseline Average	Historical Average	Q3 2021 – Q2 2022 Average	
OU-1	Shallow Zone	12.5	20.8	12.4	OZMW-16, OZMW-17, OZMW-18, OU2MW-50, OU2MW-57
	Intermediate Zone	7.0	16.3	11.6	
	Deep Zone	0.1	6.4	5.4	
OU-2	Shallow Zone	5.4	23.8	9.9	OU2MW-02, OU2MW-19, OU2MW-30, OU2MW-39, OU2MW-47, OU2MW-55
	Intermediate Zone	3.0	24.6	15.6	
	Deep Zone	5.0	12.9	7.5	
OU-3	Shallow Zone	9.9	9.4	10.8	OU3MW-07, 19, 20, IO-10, MW-34, MW-46WR, MW-70/70S
	Intermediate Zone	2.4	13.5	10.5	

Notes:
 mg/L – milligrams per liter

Table 2i. Summary of ORP Values

Operable Unit	Groundwater Interval (feet)	ORP Values (millivolts)			Downgradient Monitoring Wells
		Baseline Average	Historical Average	Q3 2021 – Q2 2022 Average	
OU-1	Shallow Zone	29	143	115	OZMW-16, OZMW-17, OZMW-18, OU2MW-50, OU2MW-57
	Intermediate Zone	63	177	179	
	Deep Zone	0	90	55	
OU-2	Shallow Zone	51	224	226	OU2MW-02, OU2MW-19, OU2MW-30, OU2MW-39, OU2MW-47, OU2MW-55
	Intermediate Zone	3	190	188	
	Deep Zone	50	139	134	
OU-3	Shallow Zone	-4	49	96	OU3MW-07, 19, 20, IO-10, MW-34, MW-46WR, MW-70/70S
	Intermediate Zone	20	170	186	

Specific trends in DO and OPR values are presented below:

- Although lower than the historical averages in select areas and intervals, likely due to system operation interruptions identified above, DO concentrations in shallow and intermediate groundwater (OU-1, OU-2, and OU-3) and deep groundwater (OU-1 and OU-2) have generally remained significantly above baseline values (prior to system startup), including during this reporting period.

- ORP values in all monitored areas and intervals have increased significantly above baseline values collected prior to system startup and have remained elevated during this reporting period.

Historical DO and ORP concentrations (and pH, conductivity, and temperature) for Site wells are provided in Appendix E.

2.3.3.3 Performance Monitoring and Contaminant Concentration Trends

Significant reductions in total BTEX and total PAH concentration trends have been observed since startup of the oxygen injection systems, as discussed in Section 4. Total BTEX and total PAH concentration trends compared to DO concentrations at monitoring wells located at and downgradient of OU-1, OU2, and OU-3 are depicted on Figures 4, 5 and 6, respectively.

3. Groundwater Level Monitoring and Well Condition Assessment Programs

This section presents a summary of the hydrogeologic setting of the Site, the groundwater level monitoring program, and the results of groundwater elevation and groundwater flow direction monitoring for the Site.

3.1 Hydrogeologic Setting

The Upper Glacial, Magothy, and Lloyd represent Long Island's three major aquifers. The Upper Glacial aquifer is a water table aquifer and is the primary aquifer of concern at the Site; though, the Upper Glacial aquifer is not used as a source of potable water at or downgradient of the Site.

The Upper Glacial aquifer is a moderate to highly permeable glacial outwash deposit, consisting mainly of inter-bedded layers of permeable sand and gravel and less permeable layers of silty sand. The Upper Glacial aquifer is approximately 70 feet thick at the Site. The water table is present within the upper 10 feet of the aquifer at the Site, which becomes progressively more shallow downgradient of the Site. Lower permeability zones define the boundary between the Upper Glacial and Magothy aquifers in the vicinity of the Site.

3.2 Groundwater Level Monitoring

Groundwater level monitoring is conducted annually at the Site to determine groundwater elevations and resultant groundwater flow regimes. Review of groundwater elevations and flow directions aids in monitoring and evaluating the effectiveness of remedial activities and is also useful in future remedy planning. Well locations are depicted on Figure 1.

The network of wells at the Site includes 80, 137, 52, and 43 wells located at OU-1, OU-2, OU-3, and OU-4, respectively. In addition, five surface water gauging stations are located at the Site, as follows: BBSW-07 at Lawrence Lake and OU2SW-01 and BBSW-06 at Lawrence Creek (OU-2); BBSW-13 at O-Co-Nee Pond (OU-3); and BBSW-14 at Watchogue Creek (a.k.a., Crum's Brook) along Union Boulevard (OU-4). Primarily based on limited access to some wells and some wells not having been surveyed, depth to groundwater measurements were collected from a total of 257 wells and five surface water gauging stations throughout the Site in Q2 2022 (June 27 through June 30, 2022). Given the number of wells monitored and their vertical and areal distributions throughout the Site, it was determined that sufficient water level data was collected to effectively determine groundwater elevations and flow directions throughout the shallow and deep portions of the aquifer at the Site.

Depth to groundwater results and calculated groundwater elevations (based on the North American Vertical Datum (NAVD) 88 datum [November 2007 or subsequent surveys]) are provided in Tables 3-1 through 3-8.

3.3 Groundwater Elevations and Flow

As depicted on Figures 7 through 9, shallow and deep groundwater flow directions at and downgradient of the Site are generally toward the south/southeast, with generally similar shallow and deep groundwater elevations and flow directions.

Figure 10 provides hydrographs depicting historical groundwater elevations for select representative shallow, intermediate, and deep zone wells from Q2 2022. The hydrographs show typical historical seasonal variations in groundwater elevations throughout all aquifer zones. Q2 2022 values are generally lower than average historical values, but similar to the previous monitoring event (Q2 2021).

Minimum and maximum historical values used for the hydrograph are summarized below in Table 3a.

Table 3a. Summary of Historical Groundwater Elevations

Groundwater Depth Zone	Minimum Historical Water Level Elevation			Maximum Historical Water Level Elevation		
	Value*	Monitoring Well	Date	Value*	Monitoring Well	Date
Shallow	9.41	BBMW-24S	Q3 2007	18.00	MW-09S	Q2 2010
Intermediate	9.44	BBMW-24I	Q3 2007	18.02	MW-09I	Q2 2010
Deep	9.44	BBMW-24D	Q3 2007	16.40	BBMW-05D	Q2 2010

Note:

*: Feet above mean sea level (NAVD 88).

3.4 Monitoring Well Condition Assessment Program

Concurrent with the collection of groundwater level measurements, the condition of each well is assessed for damage or other indications which may affect the viability of the wells. All wells were observed to be accessible and in good condition during this reporting period; however, minor repair items, such as replacement of broken well covers, etc., were completed concurrently with site-wide groundwater sampling activities.

As summarized in a December 2021 Monitoring Well Abandonment letter, a total of 17 monitoring wells located in the OU-3 area were abandoned in October 2021, in accordance with the NYSDEC-approved work plan and NYSDEC's CP-43 monitoring well decommissioning policy document. A summary of the monitoring wells abandoned at OU-3 during this reporting period is provided below in Table 3b.

Table 3b. Summary of Abandoned Monitoring Wells at OU-3

Monitoring Well ID	Total Depth (ft bgs)	Screened Interval (ft bgs)
Monitoring Well Cluster BMW-09		
BMW-09S	15	5-15
BMW-09I	40	30-40
BMW-09D	72	62-72
83 Community Road Monitoring Wells		
MW-76	16	11-16
SV-03	72	2-12
87 Community Road Monitoring Wells		
MW-73	12	2-12
MW-73I	27	22-27
MW-75	12	2-12
MW-75I	27	22-27
MW-79	20	5-20
MW-81	20	5-20
MW-82	20	5-20
OU3MW-14S	12	2-12
OU3MW-15S	12	2-12
SV-02	12	2-12
SV-02I	27	22-27
SV-02I2	40	35-40

4. Groundwater Quality

A summary of total BTEX and total PAH groundwater impacts for the current reporting period is provided in the subsections below. Also provided below is a description of the lateral and areal extents of the current composite plume for each of the OUs, based on the sample results from the annual sample round completed in Q2 2022. As indicated above, the annual sampling round includes the largest number of wells and is, therefore, the most complete data set.

Given the reductions in plume size and contaminant concentrations achieved through implementation of remedial activities at the Site since Q1 2009 (as summarized in Section 1) and based on the 2012 NYSDEC-approved monitoring program modification/reduction criteria, a total of 157 wells were sampled during this reporting period (61 wells at OU-1, 52 wells at OU-2, 31 wells at OU-3, and 13 wells at OU-4). The groundwater well locations, as well as geographic boundaries and remedial components for all Site OUs, are depicted on Figure 1.

To facilitate an understanding of the scope and scale of remedial progress at and downgradient of all Site OUs, Figure 1 also provides representations of the areal extents of the composite total BTEX and total PAH plumes from the 2004 RI, the “baseline” pre-remedial Q1 2009 investigation (as further explained below), and the current Q2 2022 annual sampling round. Given the multiple remedial activities completed at the Site since Q1 2009 (summarized in Section 1), it would be expected that contaminant concentrations would have reduced significantly and that overall contaminant concentration trends would have been reduced over time at the Site. As described below, a comparison of current and historical contaminant concentrations and trends confirms such expectations.

The groundwater quality descriptions and comparisons below are generally organized by OU, then by OU feature (i.e., upgradient or downgradient of the OU-1 barrier wall, etc.), as appropriate, and then by aquifer zone, as follows:

- **Shallow Zone:** Includes wells with the top of the well screen located up to 10 feet bgs.
- **Intermediate Zone:** Includes wells with the top of the well screen located from 10 feet through up to 50 feet bgs.
- **Deep Zone:** Includes wells with the top of the well screen located at or deeper than 50 feet bgs.

The below subsections provide a description of iso-concentration maps developed to illustrate the current and historical distributions of total BTEX and total PAH concentrations at and

downgradient of the Site OUs (Figures 11 through 16); a discussion of current contaminant concentrations and applicable comparisons to historical data; and an analysis of sulfate concentrations within select OU-1 and OU-2 wells.

4.1 Current and Historical Plume and Iso-Concentration Maps

The distribution of total BTEX and total PAH concentrations within the Upper Glacial aquifer for the annual Q2 2022 sample round are depicted as iso-concentration lines for the three aquifer zones (shallow, intermediate, and deep) presented in Figures 11 through 16, respectively. As such, the iso-concentration lines depict the Q2 2022 data set only and will not include BTEX and PAH variations identified in other quarters during this reporting period. Iso-concentration figures associated with the quarterly sampling events completed during this reporting period (Q3 2021, Q4 2021, and Q1 2022) are also provided in Appendix F, for informational purposes.

It should be noted that data associated with temporary wells in OU-3 are excluded from the iso-concentration figures, given their differing construction materials and methods.

The iso-concentration lines depicting the Q1 2009 sample round on each figure represent historical pre-remedial or “baseline” groundwater conditions within the OU areas. As such the Q1 2009 data plume is referred to as the Baseline Q1 2009 Plume. However, it should be noted that, pre-S-ISCO injection data generated in April 2009 for several OU-4 wells (WCMW-11S, I, and D, WCMW-17S, I, and I2, and WCMW-18WT, S, I, and I2) was used in the development of the Baseline Q1 2009 iso-concentration maps.

The horizontal distribution of contaminants on each figure are depicted as lines of equal concentration (iso-concentration lines), which were generated using a combination of applied methods. Initially, the lines were created by direct graphical interpolation between concentrations. These lines were then modified to factor in groundwater flow, considering the southeasterly flow direction and the low transverse dispersion of the Upper Glacial aquifer, as well as other local hydraulic factors that might influence groundwater flow. For the purposes of this report, the areal extent of groundwater impacts (total BTEX and total PAH plume outlines) for each aquifer zone is defined by the 100 µg/L contour. The iso-concentration lines also define the areal extents of the composite plumes represented on Figure 1.

Based on review of Figures 11 through 16, the overall OU1/OU2 groundwater plumes (concentrations of total BTEX and total PAH equal to or greater than 100 µg/L) have significantly reduced in size and concentration since remedial activities began in 2009. These significant reductions include the elimination of shallow and intermediate impacts above 100 µg/L in OU-2, excluding one shallow well (BBMW-23S) located near the OU-1/OU-2 boundary. Prior to implementation of remedial activities, intermediate zone OU-2 impacts were historically present from the OU-1 source area extending approximately 2,700 feet southeast from the Site.

As depicted on Figure 11, OU-3 shallow BTEX impacts in the Brightwaters Yard have been reduced by up to two orders of magnitude by implementation of the various remedial activities at the Site, and generally continue to decrease over time. Intermediate impacts identified in the area have also been reduced significantly (Figures 13 and 14). Similar decreases are also evident in the shallow and intermediate zones downgradient of the Brightwaters Yard, where impacts above 100 µg/L have been greatly reduced. Shallow impacts (primarily total BTEX) downgradient of the Brightwaters Yard historically extended south of Union Boulevard, prior to implementation of remedial activities (remedial excavations, treatment system installations and modifications, and ORC-A injections), as detailed in Section 1.

Review of Figures 11 through 14 indicates that OU-4 wells continue to exhibit decreasing concentration trends in shallow and intermediate zone wells. However, impacts above 100 µg/L are periodically detected in limited shallow and intermediate wells screened outside or below the vertical extent of the remedial excavation. No impacts have been present in the deep zone.

The lateral and areal extents of the current (annual Q2 2002 groundwater sampling event) and historical plume at the Site are discussed further and the iso-concentration figures referred to as appropriate in the following subsections to facilitate an understanding of the scope and scale of remedial progress over time at the Site.

4.2 Operable Unit 1/Operable Unit 2

The groundwater plume emanates from the source area (OU-1) and extends downgradient into the OU-2 area. Due to their dependent relationship, the two OUs are presented and evaluated together in this section.

Of the 61 groundwater samples collected throughout the OU-1 and OU-2 areas, a total of 42 wells exhibited exceedances of the AWQS for total BTEX and/or total PAHs during this reporting period; however, 26 of these wells that exhibited total BTEX and/or total PAHs concentrations above 100 µg/L are located within the capture zone of the barrier wall and the on-site OU-1 groundwater treatment area. As identified in Section 2.1.2, multiple wells in this area also exhibited measurable thicknesses of NAPL and were, therefore, not sampled.

4.2.1 Total BTEX and Total PAH Composite Plume Comparison

Based on review of Figure 1, the composite Q2 2022 plume is similar to recent events and is comprised of one main area, which has been significantly reduced in overall area from the single larger historical 2004 RI plume, with two smaller areas in the vicinity of the barrier wall. The main plume area begins in the upgradient portion of OU-1 and extends downgradient into OU-2, while the two smaller plume areas are located immediately to the east of the barrier wall within the OU-1 area and southwest of the main plume area, with small areas defined by impacts observed in only one well cluster each.

Overall, current shallow and intermediate impacts above 100 µg/L at OU-2 have been largely eliminated and are only present in one shallow well (BBMW-23S). In comparison to the Baseline Q1 2009 Plume, the current composite Q2 2022 plume has been significantly reduced in both length and width, with the majority of impacts limited to the upgradient portion of the mid-plume area. The current composite plume has been reduced by over 2,000 feet in length and 450 feet in width (at its widest point) in comparison to the Baseline Q1 2009 plume (Figure 1).

4.2.2 OU-1/2 Groundwater Quality

The groundwater quality discussion below is divided into two sections: upgradient of the barrier wall; and outside the capture zone at OU-1 and/or downgradient the barrier wall at OU2. Historical total BTEX and total PAH analytical results are presented in Tables 4-1 and 4-2 for OU-1 and Tables 4-4 through Table 4-9 for OU-2. Analytical results for this reporting period for OU-1 and OU-2 are presented in Table 4-3 and Table 4-10, respectively.

4.2.2.1 Upgradient of the Barrier Wall

Current contaminant concentrations upgradient of the barrier wall remain similar to recent results, with maximum concentrations well above 1,000 µg/L (total BTEX and total PAHs). It should be noted that wells exhibiting such concentrations are all located upgradient of the barrier wall. Downgradient of the wall and the oxygen injection system in the area, impacts have been greatly reduced, as discussed further below. In general, impacts upgradient of the barrier wall are most prevalent in the central and western portions of the area between the LIRR and the subsurface barrier wall in each of the three groundwater zones. The highest concentrations in the shallow portion of the aquifer are generally total BTEX, while total PAH concentrations are generally higher in the intermediate and deep zones. It should be noted that three intermediate wells located north of the LIRR (BBMW-34I2, BBMW-38I, and BBMW-38I2) have not been sampled in recent events due to the presence of DNAPL in the wells, as described in Section 2.1.2.

Impacts above 100 µg/L to the north of the LIRR are limited to the shallow and intermediate zones. Similar to previous monitoring events, monitoring well BBMW-41S, located north of the LIRR, exhibited the highest total BTEX (ranging up to 3,707 ug/L in Q4 2021) during this reporting period, though concentrations are historically variable. The highest total PAH concentrations (ranging up to 5,633 ug/L in Q2 2022) were detected in monitoring well OZMW-24I2, located downgradient of the ozone injection system and upgradient of the subsurface barrier wall. In addition, several shallow wells in the area north of the LIRR, particularly on the eastern portion of OU-1, have historically exhibited total BTEX and total PAH concentrations sporadically above 100 ug/L. These and other variable shallow zone detections are likely the result of fluctuations in groundwater elevations.

As shown below in Table 4a, shallow and intermediate contaminant concentrations upgradient of the barrier wall have been significantly reduced since implementation of remedial activities in Q1 2009 described in Section 1.

4.2.2.2 Outside and/or Downgradient of the Barrier Wall

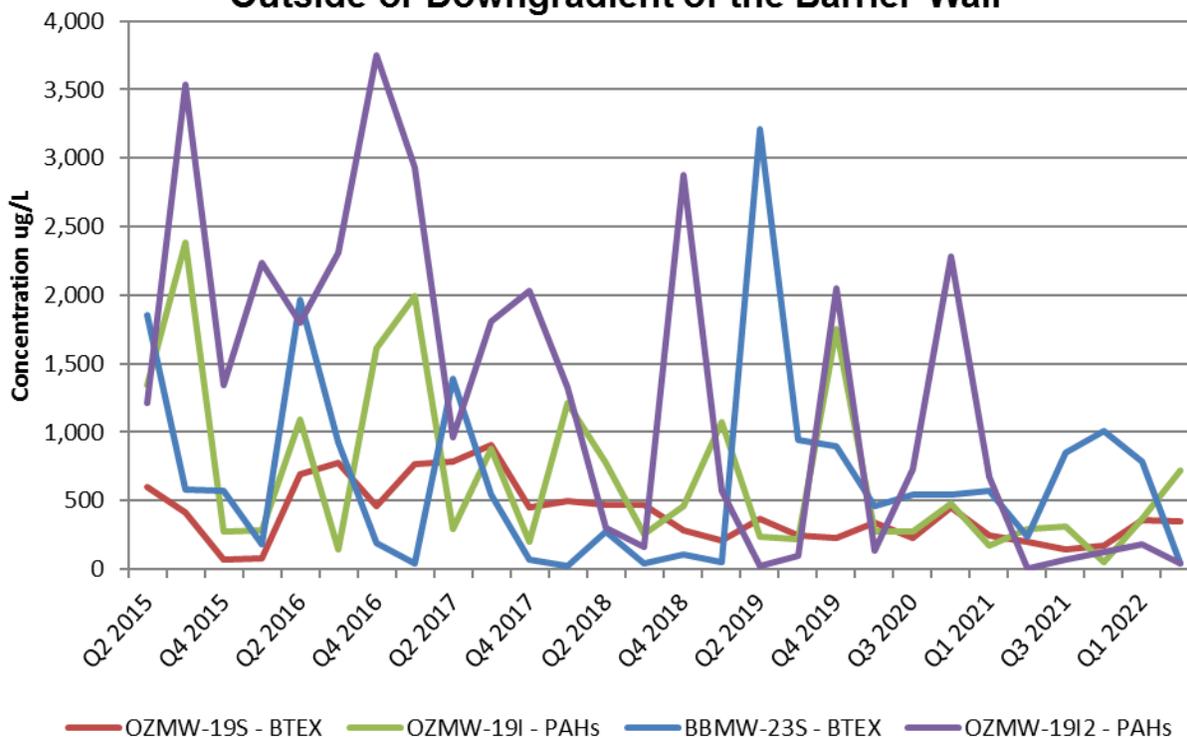
Contaminant concentrations above 100 µg/L have been reduced significantly outside and/or downgradient of the barrier wall capture zone since implementation of remedial activities in Q1 2009. As such, several oxygen injection systems have been shut down with NYSDEC approval. Most recently, the 9 North Clinton Avenue system was shut down in August 2021, and post shut-down monitoring has commenced.

In recent sampling events, concentrations above 100 µg/L in the shallow or intermediate zones were generally present in only two areas: in the shallow zone immediately downgradient of the barrier wall at monitoring well BMW-23S and OZMW-18S; and in the shallow and intermediate zones at the OZMW-19 cluster (OZMW-19S, OZMW-19I, and OZMW-19I2), located immediately to the east of the barrier wall. Total BTEX concentrations above 100 µg/L were identified at shallow wells BMW-23S and OZMW-19S in the majority of sampling events during this reporting period, while BTEX concentrations in BMW-23S were at or near 1,000 µg/L, and have decreased significantly, as discussed further below. Total PAHs concentrations in intermediate wells OZMW-19I and OZMW-19I2 were sporadically above 100 µg/L throughout the reporting period, though were generally lower in the deeper intermediate zone (OZMW-19I2). BTEX concentrations were also sporadically above 100 µg/L in OZMW-19I2. Contaminant concentrations in each of the OZMW-19 wells have been variable, though generally decreasing, in recent events and are significantly below historical levels.

Shallow well BMW-23S, located immediately downgradient of the barrier wall, is the only shallow well in this area exhibiting remaining contaminant concentrations in exceedance of 100 µg/L. Overall, impacts at BMW-23S have been significantly reduced from over 40,000 µg/L total BTEX and 3,000 µg/L total PAHs prior to or near the start of the remedial period (Q1 2009). Total BTEX concentrations in BMW-23S continue to be variable, but have been generally decreasing in recent events, following a temporary significant increase during Q2 2019. The Q2 2022 total BTEX concentration (45 µg/L) was near the historical minimum. Total PAH concentrations in BMW-23S have trended lower over time, remaining below 100 µg/L during this reporting period. Historically, this well has exhibited temporary contaminant concentration increases in February and June, corresponding to periods of higher water table elevations. The shallow impacts still observed at BMW-23S are currently localized and are not observed downgradient of the Cooper Lane oxygen injection system.

The recent shallow total BTEX and intermediate total PAHs concentrations in these wells are presented on the graph below.

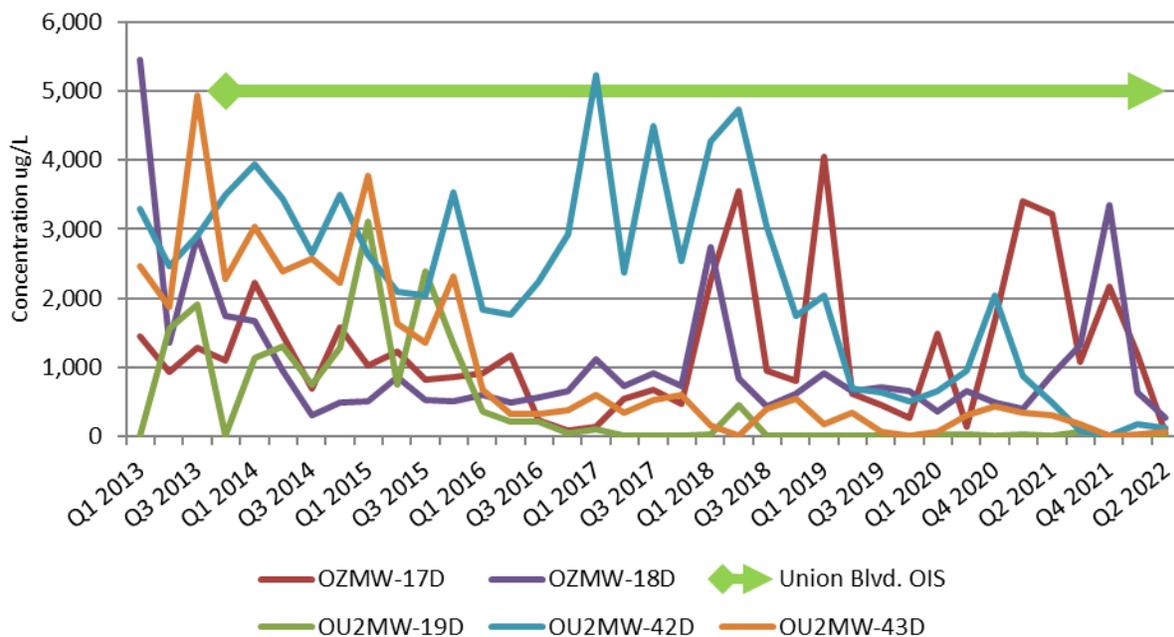
Recent Concentrations Shallow and Intermediate Wells Outside or Downgradient of the Barrier Wall



In the deep zone, total BTEX and total PAH concentrations above 100 µg/L are currently observed in the area immediately downgradient of the barrier wall. Concentrations observed are similar to recent sampling events (Figures 15 and 16). Total PAH impacts are larger in area and are generally characterized by higher concentrations than corresponding total BTEX concentrations and are, therefore, the focus of the discussion below.

In general, total BTEX and total PAH detections in deep wells located immediately downgradient of the barrier wall (OZMW-17D and OZMW-18D) have remained elevated in recent sampling events. Current average deep concentrations at OZMW-17D and OZMW-18D have increased relative to the previous reporting period (see total PAH graph below). However, significant decreases were noted in these wells during Q2 2022, with only total PAHs in OZMW-18D remaining above 100 µg/L.

Deep Zone Total PAH Concentrations - Downgradient of Union Blvd. and Cooper Lane Oxygen Injection Systems



Further downgradient, BTEX was not detected at concentrations above 100 µg/L in any deep OU-2 well. Current deep total PAH impacts within the OU-2 area extended to Cooper Lane and the 33 North Clinton Avenue oxygen injection system. Although significant contaminant concentrations reductions have been achieved at wells OU2MW-42D and OU2MW-43D in this area relative to historical levels, concentrations of total PAHs in these wells have remained periodically elevated, at respective concentrations of up to approximately 172 µg/L and 166 µg/L during this reporting period. It should be noted that current total PAH concentrations in wells OU2MW-42D and OU2MW-43D, as well as OU2MW-19D, have decreased relative to the previous reporting period (see graph above). Additional remedial measures will be considered in the event that contaminant concentrations remain elevated in this area.

As described above, shallow and intermediate zone concentrations in the area downgradient of the barrier wall have decreased significantly since the start of remedial activities in Q1 2009; however, deep zone concentrations have remained elevated. Average contaminant concentrations at well clusters located immediately downgradient of the barrier wall (OZMW-16, OZMW-17, and OZMW-18), are provided in the below in Table 4b.

Table 4a. Average Contaminant Concentrations Downgradient of Barrier Wall

Compound Group	Depth Zone					
	Shallow		Intermediate		Deep	
	Q1 2009	Q2 2022	Q1 2009	Q2 2022	Q1 2009	Q2 2022
Total BTEX	294	6.2	580	4.8	60	29.8
Total PAH	53	ND	838	0.3	434	101

Notes:

Concentrations provided in µg/L.
 ND: Not Detected.

Current contaminant exceedances of the AWQS downgradient of the barrier wall and the oxygen injection system at the downgradient edge of OU-1 were limited during the current reporting period. Excluding the monitoring wells discussed above, sporadic exceedances of the AWQS for toluene, ranging in concentration from 5.6 µg/L to 88 µg/L, were detected at cluster OU2MW-02 (intermediate wells OU2MW-02S and OU2MW-02I and deep well OU2MW-02I2). Toluene was not detected in any wells upgradient of the OU2MW-02 well cluster. Toluene concentrations will be closely monitored at this location during future sampling events. Aside from the above descriptions, no other BTEX compounds were detected above the AWQS in the OU-2 wells.

Time series plots for wells located downgradient of the oxygen injection systems are provided on Figures 4 and 5, which graphically depict the above analytical results and illustrate the significant contaminant concentration reductions achieved through implementation of remedial activities at the Site since Q1 2009 (as summarized in Section 1).

4.3 Operable Unit 3

Given the reductions in plume size and contaminant concentrations resulting from the implementation of remedial activities in OU-3 (as summarized in Section 1), a total of 31 monitoring wells are currently sampled quarterly at OU-3. A total of 16 wells exhibited exceedances of the AWQS for total BTEX and/or total PAHs during this reporting period; however, the exceedances were not consistently observed. Concentrations of total BTEX or total PAHs above 100 µg/L were detected in seven wells, but only total BTEX was consistently above 100 µg/L in each sampling event in OU3MW-08S during the reporting period.

As a result of historical remedial activities, significant reductions in groundwater impacts at and downgradient of OU-3 have been noted during recent sampling events, with no impacts above 100 µg/L detected downgradient of the LIRR sheeting cells. Downgradient detections above the AWQS were limited to only four wells during this reporting period, as discussed below.

4.3.1 Total BTEX and Total PAH Composite Plume Comparison

In comparison to the Q1 2009 OU-3 plume configuration, current (annual Q2 2002 groundwater sampling event) contaminant concentrations above 100 µg/L at OU-3 have been reduced

significantly and are limited to only one small area in the vicinity of Brightwaters Yard shallow well OU3MW-08S (up to 2,740 µg/L) and intermediate well OU3MW-09I (up to 169 µg/L). One shallow and one intermediate well located immediately south of the LIRR ROW (OU3MW-13S and MW-64, respectively) exhibited one detection above 100 µg/L during this reporting period. No contaminant concentrations above 100 µg/L were observed downgradient of Community Road during the current reporting period.

The current composite OU-3 plume is generally similar in size to the previous Q2 2021 plume depiction.

4.3.2 OU-3 Groundwater Quality

Typically, OU-3 wells exhibit significantly lower PAH concentrations than comparable BTEX concentrations. As such, BTEX is used as an indicator of site-related groundwater impacts and is the focus of the discussion below, which has been divided into three areas: upgradient (Brightwaters Yard); within the LIRR ROW sheeting cells; and downgradient of the LIRR ROW.

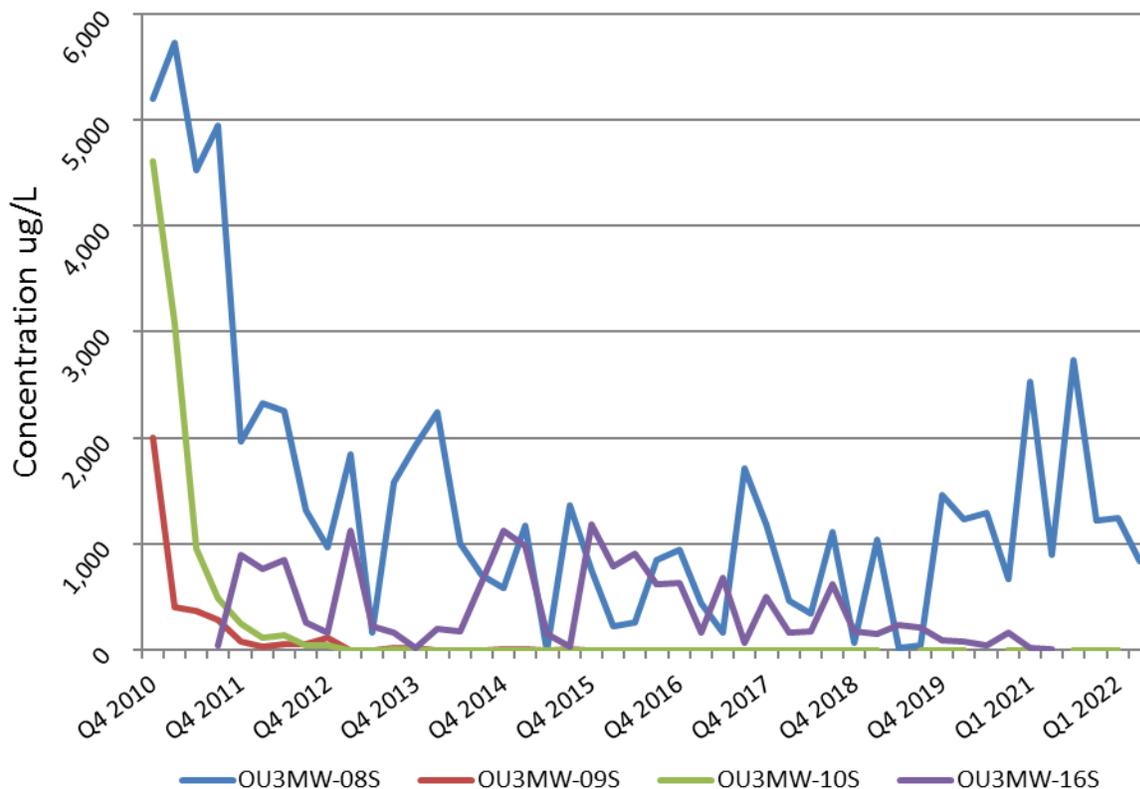
Historical OU-3 total BTEX and total PAH concentrations are presented in Table 4-11 and Table 4-12, respectively, while current analytical results for this reporting period are presented in Table 4-13. The area of total BTEX and total PAH impacts above 100 µg/L are provided on Figures 11 through 14.

4.3.2.1 Upgradient Area (Brightwaters Yard)

Shallow groundwater concentrations in the Brightwaters Yard have decreased significantly via the completion of several remedial actions in this area (Section 1), including the September 2019 ORC-A injection program. Historical ORC-A injection and OU-3 permanent and temporary monitoring well locations are shown in Figure 17.

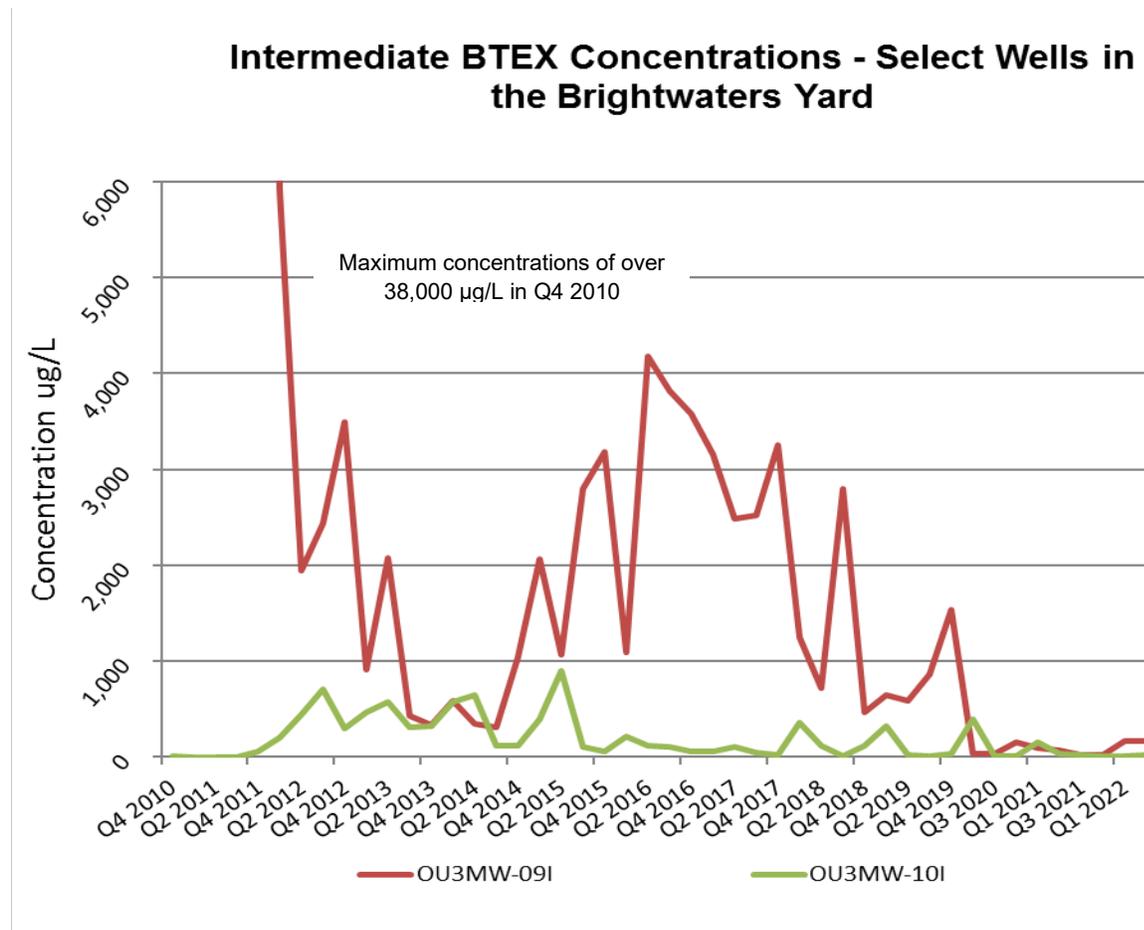
The greatest total BTEX concentrations in the area (ranging from 838 µg/L to 2,740 µg/L) were detected in shallow monitoring well OU3MW-08S, located in the southwest portion of the Brightwaters Yard, west of the historical main source excavation area. Total BTEX concentrations in OU3MW-08S were variable, though predominantly trending downward since Q3 2021, but were generally slightly higher than the previous reporting period (see graph below). It should be noted that, based on review of the OU3MW-08S boring log, a shallow peat unit exists in the vicinity of the well, potentially limiting ORC-A effectiveness around the well. However, possibly due to the ORC-A injections, contaminants in nearby well OU3MW-16S continue to exhibit near-historical low concentrations, with total BTEX ranging from 0.38 µg/L to 37 µg/L and total PAHs ranging from non-detect to only 6.9 µg/L during this reporting period.

Post Excavation Shallow BTEX Concentrations - Select Wells in the Brightwaters Yard



During the current reporting period, total BTEX concentrations above 100 µg/L in intermediate wells were limited to OU3MW-09I (ranging from 24.27 µg/L to 169 µg/L), located in the Brightwaters Yard immediately upgradient of the LIRR excavation area (see graph below). Similar to, though less pronounced than the historical reductions observed in shallow groundwater in this area, contaminant concentration reductions have been observed at intermediate well OU3MW-09I. Although still elevated, detections at intermediate well OU3MW-09I are approximately three orders-of-magnitude below initial concentrations detected immediately following source area excavation (up to 38,700 µg/L in Q4 2010). These variations may be related to fluctuations in groundwater elevations. Total BTEX concentrations in intermediate monitoring well OU3MW-10I continue to vary slightly (ranging from 8.9 µg/L to 22.1 µg/L during this reporting period) and were well below the high from the previous reporting period of 154 µg/L. Concentrations of total PAHs in these wells are lower than the corresponding total BTEX concentrations but have followed similar trends.

Given the above assessment, the September 2019 ORC-A injection program has resulted in significant contaminant concentration reductions at OU3MW-09I and OU3MW-16S but has been less effective in reducing contaminant concentrations at OU3MW-08S.

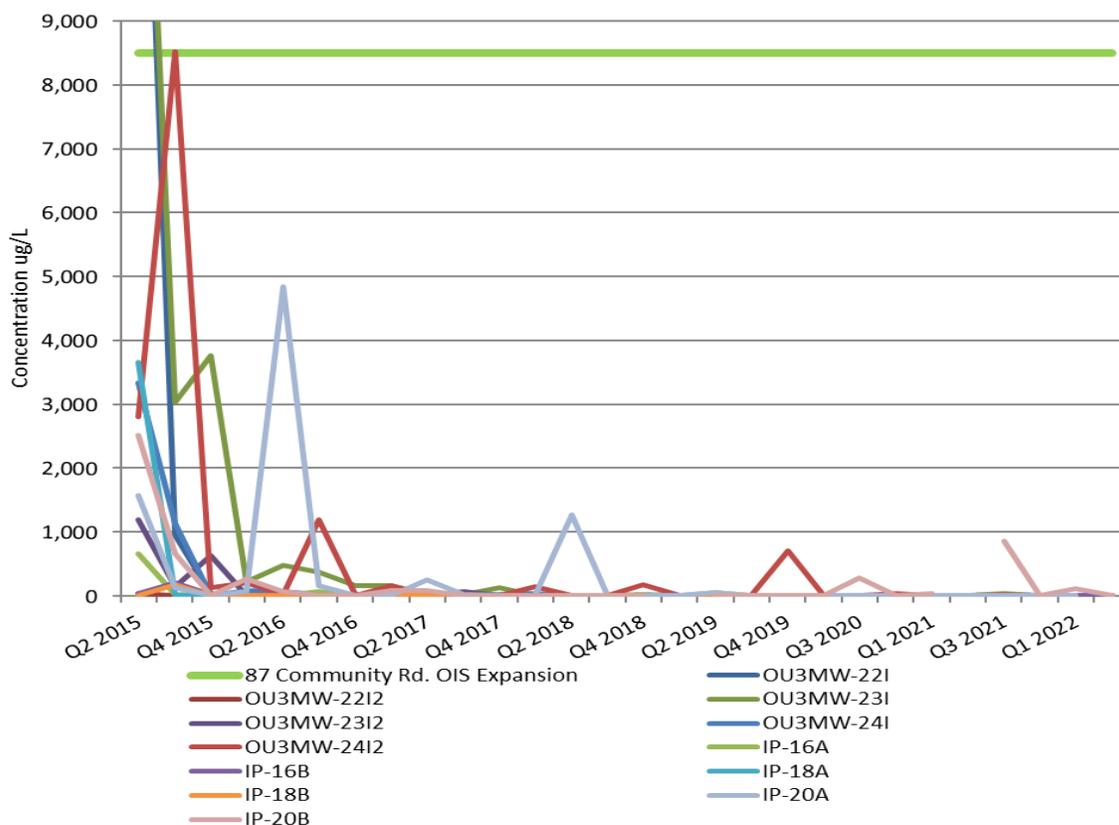


4.3.2.2 Sheeting Cell Areas (Southern Brightwaters Yard and LIRR ROW)

Consistent with historical trends, contaminant concentrations within the sheeting cells at the southern portion of the Brightwaters Yard varied widely, with highs generally near the upper end of historical concentration ranges. Total BTEX concentrations in temporary wells (TMW-01I, TMW-02I, and TMW-03I) ranged from 0.3 µg/L to 222 µg/L. Total BTEX concentrations in temporary wells (TMW-01I2, TMW-02I2, and TMW-03I2) ranged from 0.34 µg/L to 1,202 µg/L. The maximum concentration identified at both sets of wells were in the westernmost cell at temporary wells TMW-01I and TMW-01I2, respectively. Total BTEX concentrations in the deeper wells, where the more significant impacts were noted prior to ORC-A injections, have generally reduced, but have been highly variable. These remaining concentrations will be closely monitored and may indicate that additional remedial action may be warranted in these areas.

BTEX and PAH compound concentrations were either non-detect or marginally above the AWQS in all permanent and temporary monitoring wells within the intermediate zone in the LIRR ROW sheeting cell area during this reporting period (see graph below). However, well IP-20B exhibited a spike of 851 µg/L during Q3 2021, sharply above recent historical concentrations, which have ranged from non-detect to 278 µg/L over the last two years. Monitoring well, injection well, and sheeting cell location details are provided on Figure 17.

**Intermediate BTEX Concentrations -
 Within LIRR Sheeting Cells**



4.3.2.3 Downgradient of the LIRR ROW

Since remedial activities were implemented, contaminant concentrations above 100 µg/L have been significantly reduced in this area and were only observed in one sampling event (Q3 2021) during the reporting period in one shallow well (OU3MW-13S) and one intermediate well (MW-64). Monitoring well OU3MW-13S, located immediately south of the LIRR ROW at 87 Community Road, exhibited total BTEX at concentrations ranging from non-detect to 109 µg/L (Q3 2021), an increase over recent generally non-detect concentrations. Monitoring well MW-64, located immediately south of the LIRR ROW at 83 Community Road, exhibited total BTEX at concentrations ranging from non-detect to 144 µg/L (Q3 2021). Notably, monitoring well MW-65, located immediately south of the LIRR ROW at 87 Community Road,

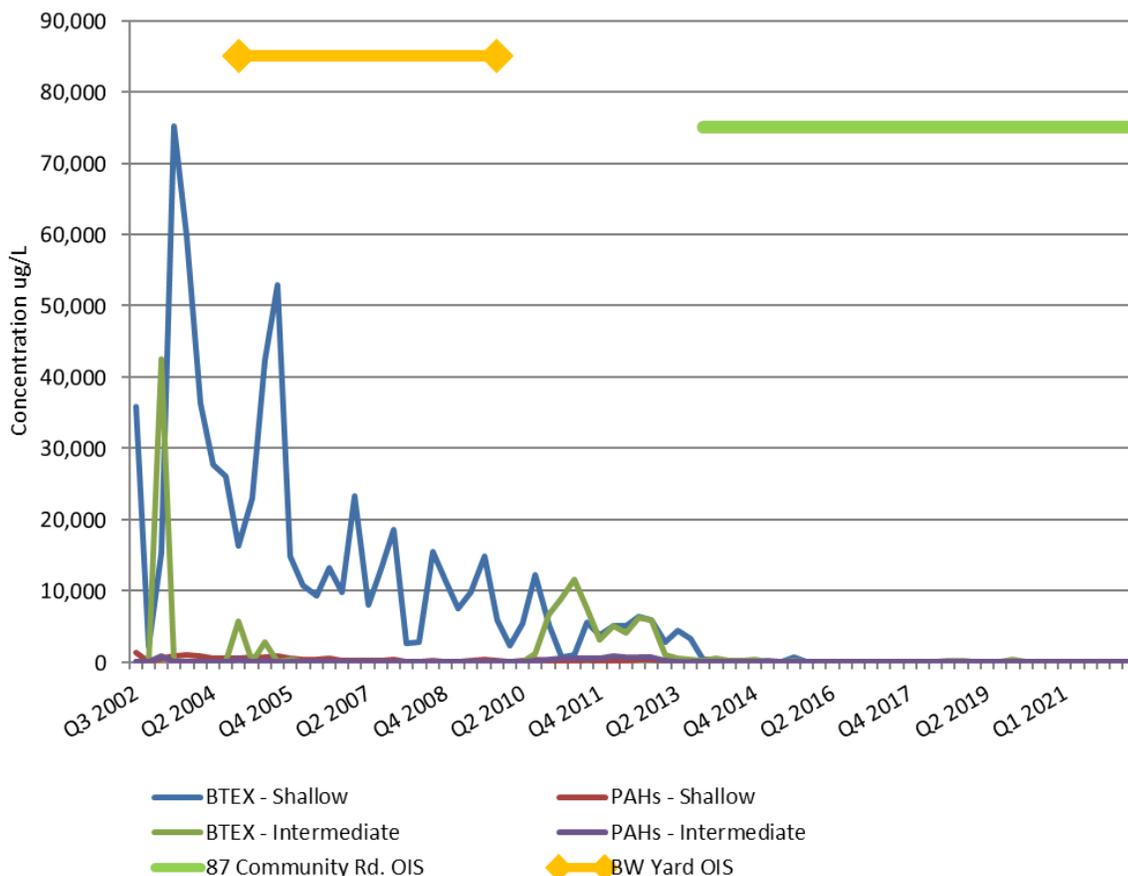
exhibited total BTEX at concentrations ranging from non-detect to only 13.6 µg/L (Q2 2022), below its high of 212.9 µg/L observed during the previous reporting period.

Farther downgradient of the LIRR ROW and immediately downgradient of the 87 Community Road oxygen injection system, monitoring well OU3MW-20I2 exhibited typically variable contaminant concentrations, with total BTEX ranging from non-detect to 62.71 µg/L and total PAHs ranging from non-detect to 94.7 µg/L (both highs detected during Q2 2022 sample round). Contaminant concentrations at nearby well cluster OU3MW-19, located immediately downgradient of the 87 Community Road residence were either non-detect or below the AWQS during all sample rounds.

The concentrations in all OU3MW-07 cluster wells located downgradient of Community Road oxygen injection system were non-detect for both BTEX and PAHs during all sample rounds. All other wells located downgradient of Community Road have been eliminated from the sampling program due to a lack of detections in accordance with the NYSDEC-approved reduction criteria.

Average total BTEX and total PAHs concentrations in the shallow and intermediate zone downgradient of the LIRR ROW have been non-detect or at/near detection levels since Q1 2014 (see graph below), closely aligning with start-up of the 87 Community Road system. Time series plots displaying OU-3 graphical analytical results for wells located within and downgradient of the oxygen injection systems, are also provided on Figure 6.

Average Shallow and Intermediate Concentrations - Downgradient of LIRR ROW



4.4 Operable Unit 4

Given the reductions in plume size and contaminant concentrations resulting from the implementation of remedial activities at the OU-4 area (as summarized in Section 1), a total of 13 monitoring wells are currently routinely sampled at OU-4. It should be noted that several monitoring well clusters located on private properties west of the OU-4 former cesspool area (WCMW-11, WCMW-26, and WCMW-29), which have not been accessible in recent events, were sampled during this reporting period (Q2 2022 only). However, the WCMW-04 cluster, located in the former cesspool area, was still not accessible during this reporting period. In addition, monitoring well WCMW-05I was not sampled during Q4 2021, as it was observed to contain a measurable thickness of DNAPL. During a follow-up well gauging event completed in Q4 2022, a DNAPL thickness of 0.1 feet was observed within WCMW-05I. Based on review of historical logs, a small amount of NAPL-impacted silt may exist at the bottom of WCMW-05I.

This well was redeveloped during Q4 2022, successfully removing the NAPL. The well will be monitored periodically to determine if additional NAPL accumulates.

4.4.1 Total BTEX and Total PAH Composite Plume

In comparison to the Q1 2009 OU-3 plume configuration, current (annual Q2 2002 groundwater sampling event) contaminant concentrations above 100 µg/L at OU-4 have been reduced and are limited to only two small areas in the vicinity of the former cesspool excavation area, as further detailed below. However, as identified above, well clusters WCMW-11, WCMW-26, and WCMW-29, and monitoring well WCMW-05I were not sampled during the previous annual sampling event.

The current (annual Q2 2022 groundwater sampling event) composite plume is slightly larger in size than the previous Q2 2021 plume depiction, when no accessible wells exhibited contaminant concentrations above 100 µg/L. This is primarily due to the sampling of previously inaccessible wells during the current annual sampling event (Q2 2022).

4.4.2 OU-4 Groundwater Quality

As identified above and on Figures 11 through 16, current total BTEX and total PAHs concentrations above 100 µg/L at OU-4 have been reduced and are limited to only two small areas in the vicinity of the former cesspool excavation area. Historical total BTEX and total PAH concentrations are presented in Table 4-14 and Table 4-15, while total BTEX and total PAH concentrations for this reporting period are presented in Table 4-16.

Contaminant concentrations have been significantly reduced since remedial activities were implemented at OU-4. A total of only three accessible wells sporadically exhibited exceedances of the AWQS for BTEX and/or PAH compounds during this reporting period; however, consistent with recent historical results, only total PAHs were identified at concentrations slightly to moderately above 100 µg/L during this reporting period. The greatest BTEX and PAH concentrations were detected in shallow wells WCMW-29S, located in the vicinity of the former cesspool excavation, as further detailed below.

Only PAHs were sporadically detected above 100 µg/L in three monitoring wells located in the former cesspool area during this reporting period, as follows: shallow well WCMW-29S (275.6 µg/L) and intermediate wells OU3MW-05I (ranging from 130.97 µg/L to 196.56 µg/L) and WCMW-30I (ranging from non-detect to 235 µg/L).

For comparison purposes, when last accessible for sampling in Q4 2015, monitoring well WCMW-26S exhibited total PAH concentrations of 1,597 µg/L, which have significantly decreased to 8.59 µg/L during the annual sampling event (Q2 2022). In addition, the highest historical total PAH concentrations in this area have historically been identified in WCMW-29S ranging from approximately 1,100 µg/L to 2,400 µg/L, have been reduced by more than an order

of magnitude. Both wells (WCMW-26S and WCMW-29S) were installed after the 2009 S-ISCO injection and are located outside the excavation area on the 22 Oak Street property.

Contaminant concentrations above the AWQS were not observed in former pond area monitoring well WCMW-14S during this reporting period.

4.5 Analysis of Sulfate Concentrations

At the request of the NYSDEC, National Grid currently monitors sulfate concentrations in monitoring wells located upgradient and downgradient of former OU-1 and OU-2 ISCO IRM areas, which was initially implemented to establish baseline sulfate concentrations in groundwater and identify potential trends associated with remedial activities.

Given the historical reductions in sulfate concentrations since sulfate sampling was initiated in 2007, a total of only 22 wells (seven at OU-1 and 15 at OU-2) are currently routinely sampled for sulfate. Historical and current sulfate concentrations for select wells are presented on graphs G-2 (OU-1) and G-3 (OU-2) in Appendix G.

Graphs G-2 and G-3 indicate that sulfate concentrations have been declining in OU-1 wells since 2011 and the majority of OU-2 wells since 2017. Although, sulfate is still present in limited areas in the lower intermediate and deep zones at OU-1 and OU-2, concentrations have been below the AWQS for several years, including throughout this reporting period.

5. Future Plans

As expected, given the multiple remedial activities completed at the Site since Q1 2009 (summarized in Section 1) and based on a comparison of current and historical contaminant trends (summarized in Section 4), overall contaminant concentrations at the Site have reduced significantly since Q1 2009 and have generally remained stable or have continued to reduce throughout this reporting period, with limited and minor exceptions. Based on the OM&M activities and analytical results discussed above, the following recommendations are presented below.

5.1 General Recommendations

- Based on the significant remedial progress achieved at the Site, the groundwater sampling rationale and system OM&M schedule are evaluated on a quarterly basis to ensure that these programs continue to operate in an effective and efficient manner.
- Continue to monitor Site-related impacts and associated remedial system effectiveness via quarterly and annual monitoring of the GM well network, including areas upgradient and downgradient of the on-site subsurface barrier wall and multiple treatment systems throughout the Site, in accordance with the 2012 NYSDEC-approved groundwater sampling criteria.
- Continue to evaluate the need for additional remedial measures based on contaminant concentrations within and/or downgradient of each OU and associated remedial system.
- Given that only one exceedance of the AWQS for sulfate has been detected over the past three years, sulfate monitoring at the Site should be discontinued, following NYSDEC approval.
- Continue well abandonment activities at targeted monitoring wells located throughout the Site, in accordance with the NYSDEC-approved work plan and NYSDEC's CP-43 monitoring well decommissioning policy document.
- Continue to complete minor well repair items, such as replacing broken well covers, etc., concurrent with site-wide groundwater sampling activities.

5.2 NAPL Gauging and Recovery

- Routine quarterly NAPL gauging should continue to be completed at targeted Site wells, as approved by the NYSDEC.

- Given that intermittent thicknesses of DNAPL have recently been periodically detected in OU-4 monitoring well WCMW-05I, this well has been added to the routine NAPL gauging list.
- Routine monthly DNAPL recovery via the BBRW-02 DNAPL recovery system should continue to be completed.
- DNAPL recovery from wells in the southern portion of OU-1 which exhibit DNAPL thicknesses of greater than one-foot. Recovery from wells with DNAPL thicknesses of greater than one foot began in early Q4 2022. An evaluation will be conducted to determine recovery schedules as warranted.

5.3 Treatment Systems

5.3.1 Ozone Groundwater Treatment System

- Continue routine operation and inspection of the ozone injection system, with routine maintenance completed per manufacturers' recommendations.
- Annual monitoring for ozone should continue at the SVE manifold to ensure that excess ozone is not present within the vadose zone.

5.3.2 Oxygen Injection Systems

- Continue routine operation and bi-weekly/monthly system inspection of the oxygen injection systems, with maintenance completed per manufacturers' recommendations.
- Continue to evaluate groundwater data in the vicinity of the remaining active injection systems to optimize or shut down systems, as warranted and with NYSDEC-approval.
- Evaluate whether to abandon remaining injection wells in the southern line of the 60/66 North Clinton Avenue oxygen injection system, in accordance with the NYSDEC-approved work plan, as this treatment line was replaced.

5.4 Operable Unit-Specific Recommendations

5.4.1 Operable Unit 2

- As approved by the NYSDEC, post shut-down GM in the vicinity of the Manatuck Lane portion of the Montauk Highway oxygen injection system was completed during this reporting period. A letter requesting approval to abandon the Manatuck Lane portion of the Montauk Highway oxygen injection system will be submitted to the NYSDEC in the near future.

- Continue post-shutdown GM of the 9 North Clinton Avenue oxygen injection system following its August 13, 2021, shut down during this reporting period, as approved by the NYSDEC.
- As toluene was sporadically detected above the AWQS at cluster OU2MW-02, and was non-detect upgradient of this area, toluene concentrations will be closely monitored at this location during future sampling events.

5.4.2 Operable Unit 3

- Total BTEX concentrations south of the LIRR ROW at 87 Community Road will be closely monitored during future sample events.
- The elevated total BTEX concentrations identified at intermediate temporary wells TMW-01I2, TMW-02I2, and TMW-03I2, along with persistent contaminant concentrations in shallow wells OU3MW-08S and OU3MW-16S, will be closely monitored during future sampling events and additional remedial options considered.

5.4.3 Operable Unit 4

- Potential excavation of MGP impacts beneath the 22 Oak Street property should be implemented concurrent with future potential property redevelopment activities, as warranted. As will be described in the following annual report, portions of a pre-design investigation for the excavation were completed following this reporting period to refine the initially proposed excavation limits.
- Given that the WCMW-04 well cluster, located on the LIRR ROW within the former cesspool area, has historically exhibited elevated contaminant concentrations, primarily PAHs in well WCMW-04I, further attempts to coordinate access with LIRR should be made to more consistently monitor contaminant concentrations in this area.
- Given that the trace measurements of DNAPL sporadically observed in monitoring well WCMW-05I are possibly attributable to a small amount of NAPL-impacted silt thought to exist at the bottom of the well, this material was removed from the well via redevelopment during Q4 2022. The well will be monitored periodically to determine if additional NAPL accumulates.

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Tables (compact disk only)

Tables also available at www.bayshoreworksmgp.com

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- Table 3-2.** OU-1 Historical Water Level Measurements and Calculated Groundwater Elevations
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Table 4-2. OU-1 Summary of Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, New York

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																
		Sampling Date																
		1992	1999			2002			2003			2004			2005			
Sep	Sep	Oct/Nov	Apr/May	Jun/Jul	Nov/Dec	Feb/Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec		
BBMW-05D	64.0 - 74.0	--	--	3,249	4,181	--	2,247	1,800	--	--	3,187	2,247	--	3,109	--	--	--	
BBMW-05D2/D2R	126.5 - 136.5	--	--	--	147	0	--	--	--	--	--	--	--	--	--	--	--	
BBMW-13D	62.0 - 72.0	--	--	0	40	--	--	--	--	0	--	--	0	--	--	--	--	
BBMW-20S	4.0 - 14.0	--	--	--	2,248	--	3,080	15,000	--	--	3,408	--	1,758	--	--	--	2,483	
BBMW-20I	35.0 - 45.0	--	--	--	7,134	--	7,900	7,400	--	--	6,939	--	6,956	--	--	--	8,636	
BBMW-20D	62.0 - 72.0	--	--	--	14,594	--	7,300	--	--	--	--	--	--	--	--	--	--	
BBMW-22S	5.0 - 10.0	--	--	--	3,954	--	3,700	2,500	3,608	--	2,400	2,042	4,460	4,780	2,640	143	4,549	
BBMW-22I	30.0 - 40.0	--	--	--	8,810	--	8,000	3,500	--	--	7,240	--	--	--	5,865	--	--	
BBMW-22D	64.0 - 74.0	--	--	--	11,436	--	8,808	5,300	--	--	145,100	--	--	--	4,418	--	--	
BBMW-26S	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	
BBMW-26I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	
BBMW-27S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-27I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	
BBMW-34S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-34I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-34I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-34D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-35S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-35I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-35I2	45.0-50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-35D	63.0-68.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-36S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-36I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-37S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-37I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-37I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-37D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-38S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-38I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-38I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-38D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-39S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-39I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-39I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-39D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-40S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-40I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-40I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-40D	70.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-41S	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-41I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-41I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-41D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-42S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-42I	15.0-25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-42I2	35.0-45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-43S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-43I	15.0-25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-43I2	35.0-45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-51	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-52	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-53	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-54	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-55	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-56	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-57	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-58	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-03S	3.0 - 13.0	620	17	1,425	104	--	--	--	120	20	0	28	25	0	--	0	21	
MW-03D	35.0 - 45.0	0	0	0	0	--	--	--	--	--	184	--	--	--	--	--	--	
MW-05S	4.0 - 14.0	5,514	2,360	2,964	2,682	--	2,100	1,600	--	--	2,783	--	--	--	2,144	--	--	
MW-05D	35.5 - 45.5	4,292	3,959	4,944	2,501	--	4,560	2,600	--	--	3,214	--	--	--	2,842	--	--	

Table 4-2. OU-1 Summary of Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, New York

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)															
		Sampling Date															
		1992	1999			2002			2003			2004			2005		
Sep	Sep	Oct/Nov	Apr/May	Jun/Jul	Nov/Dec	Feb/Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	
MW-09S	4.0 - 14.0	0	--	0	--	0	74	0	--	--	0	--	--	0	--	--	
MW-09I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-09J	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-09D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU1PZ-101	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU1PZ-102	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU1PZ-103	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU1PZ-104	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU1PZ-105	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-48S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-48I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-48J	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-48D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-49S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-49I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-49J	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-49D	63.0 - 68.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-50S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-50I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-50J	45.0-50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-50D	65.0-70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-51S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-51I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-51J	45.0-50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-51D	61.0-66.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-57S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-57I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-57J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-16S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-16I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-16J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-16D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-17S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-17I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-17J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-17D	53.0 - 63.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-18S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-18I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-18J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-18D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-19S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-19I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-19J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-19D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-21S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-21I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-21J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-21D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-22S/22SR	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-22I/22IR	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-22J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-22D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-23S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-23I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-23J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-23D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-24S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-24I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-24J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-24D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-25S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-25I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-25J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-25D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-26S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-26I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-26J	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OZMW-26D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-2. OU-1 Summary of Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, New York

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)															
		Sampling Date															
		2006				2007				2008				2009			
Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-05D	64.0 - 74.0	2,924	352	4,492	2,386	2,371	1,233	40	930	981	1,203	1,555	1,165	786	2,767	186	1,704
BBMW-05D2/D2R	126.5 - 136.5	0	--	--	--	--	--	--	--	0	--	--	--	0	--	--	--
BBMW-13D	62.0 - 72.0	0	--	--	--	0	0	0	0	0	--	--	--	0	--	--	--
BBMW-20S	4.0 - 14.0	--	--	1,365	2,179	1,819	1,343	860	--	--	--	--	--	0	--	--	--
BBMW-20I	35.0 - 45.0	--	--	7,722	5,749	7,160	2,189	2,033	452	75	48	348	165	1,150	137	657	78
BBMW-20D	62.0 - 72.0	--	--	--	--	2,289	4,688	5,460	--	--	--	--	--	0	--	--	--
BBMW-22S	5.0 - 10.0	4,131	2,214	--	--	1,634	2,931	3,629	3,189	24	25	1,961	1,972	1,664	986	2,329	3,239
BBMW-22I	30.0 - 40.0	7,114	--	--	--	4,696	4,283	4,879	5,212	5,536	4,290	4,686	4,680	4,949	6,539	4,155	5,071
BBMW-22D	64.0 - 74.0	6,288	--	--	--	2,725	3,310	5,374	8,516	4,257	4,894	6,442	5,681	5,140	8,539	5,411	3,812
BBMW-26S	6.0 - 16.0	0	--	--	--	0	0	0	24	0	--	--	--	0	--	--	--
BBMW-26I	30.0 - 40.0	0	--	--	--	0	0	1	--	0	--	--	--	0	--	--	--
BBMW-27S	5.0 - 15.0	0	--	--	--	0	0	0	0	0	0	2	0	0	0	0	0
BBMW-27I	30.0 - 40.0	0	--	--	--	0	0	0	--	0	--	--	--	0	0	--	--
BBMW-34S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	969	524
BBMW-34I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,223	1,887
BBMW-34I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,033	2,126
BBMW-34D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	478	256
BBMW-35S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-35I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-35I2	45.0-50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-35D	63.0-68.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-36S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
BBMW-36I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
BBMW-37S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-37I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-37I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-37D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-38S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	14
BBMW-38I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	131	1,075
BBMW-38I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	706	931
BBMW-38D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
BBMW-39S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	914	488
BBMW-39I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45	1
BBMW-39I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
BBMW-39D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
BBMW-40S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,322	73
BBMW-40I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51	3
BBMW-40I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
BBMW-40D	70.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
BBMW-41S	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,264	623
BBMW-41I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0
BBMW-41I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4
BBMW-41D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4
BBMW-42S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-42I	15.0-25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-42I2	35.0-45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-43S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-43I	15.0-25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBMW-43I2	35.0-45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-51	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-52	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-53	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-54	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-55	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-56	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-57	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IP-58	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-03D	3.0 - 13.0	25	11	0	0	0	0	9	0	0	0	--	--	0	0	--	--
MW-03S	35.0 - 45.0	0	--	--	--	0	0	0	2	0	--	--	--	0	0	--	--
MW-05S	4.0 - 14.0	2,220	1,647	2,493	1,652	1,647	1,294	1,630	1,431	1,699	144	1,306	7	1,052	1	226	1,879
MW-05D	35.5 - 45.5	2,456	435	1,984	3,122	1,113	142	55	741	2,644	390	1,988	107	232	9	138	711

Table 4-2. OU-1 Summary of Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, New York

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)															
		Sampling Date															
		2006				2007				2008				2009			
Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
MW-09S	4.0 - 14.0	0	--	--	--	0	0	0	0	0	0	0	0	0	0		
MW-09I	30.0 - 40.0	0	--	--	--	0	0	2	--	4	--	--	--	0	--		
MW-09I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0		
MW-09D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0		
OU1PZ-101	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU1PZ-102	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU1PZ-103	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU1PZ-104	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU1PZ-105	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-48S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	3	4	0		
OU2MW-48I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-48I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-48D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-49S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-49I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-49I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-49D	63.0 - 68.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0		
OU2MW-50S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-50I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-50I2	45.0-50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-50D	65.0-70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-51S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-51I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-51I2	45.0-50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-51D	61.0-66.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-57S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-57I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OU2MW-57I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OZMW-16S	5.0 - 15.0	--	--	--	--	--	--	--	830	2	0	0	0	0	0		
OZMW-16I	20.0 - 30.0	--	--	--	--	--	--	--	1,447	39	22	440	153	72	1,167		
OZMW-16I2	35.0 - 45.0	--	--	--	--	--	--	--	0	219	0	159	6	178	2,002		
OZMW-16D	55.0 - 65.0	--	--	--	--	--	--	--	1	0	0	0	0	1	1		
OZMW-17S	5.0 - 15.0	--	--	--	--	--	--	--	1,963	1	0	0	0	0	1		
OZMW-17I	20.0 - 30.0	--	--	--	--	--	--	--	5,197	5	0	0	0	12	0		
OZMW-17I2	35.0 - 45.0	--	--	--	--	--	--	--	7	0	2	0	0	62	0		
OZMW-17D	53.0 - 63.0	--	--	--	--	--	--	--	27	0	0	3	2	0	65		
OZMW-18S	5.0 - 15.0	--	--	--	--	--	--	--	569	15	0	2	0	0	0		
OZMW-18I	20.0 - 30.0	--	--	--	--	--	--	--	2,312	625	7	600	9	149	68		
OZMW-18I2	35.0 - 45.0	--	--	--	--	--	--	--	8,178	7,353	11,417	10,065	7,728	8,917	10,984		
OZMW-18D	55.0 - 65.0	--	--	--	--	--	--	--	1,684	461	0	1,279	435	1,166	1,586		
OZMW-19S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	409		
OZMW-19I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	4,299		
OZMW-19I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	5,346		
OZMW-19D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	471		
OZMW-21S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	4,403		
OZMW-21I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	4,402		
OZMW-21I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	4,012		
OZMW-21D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	952		
OZMW-22S/22SR	5.0 - 15.0	--	--	--	--	--	--	--	2,191	2,555	1,449	1,684	1,850	971	2,406		
OZMW-22I/22IR	20.0 - 30.0	--	--	--	--	--	--	--	0	0	1	0	95	0	7		
OZMW-22I2	35.0 - 45.0	--	--	--	--	--	--	--	0	0	0	0	0	0	0		
OZMW-22D	55.0 - 65.0	--	--	--	--	--	--	--	0	0	0	49	0	0	0		
OZMW-23S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	25		
OZMW-23I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0		
OZMW-23I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	6		
OZMW-23D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	38		
OZMW-24S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	6		
OZMW-24I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0		
OZMW-24I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	4,805		
OZMW-24D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	5,323		
OZMW-25S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	4,595	3,968		
OZMW-25I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	3,276	849		
OZMW-25I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	29	51		
OZMW-25D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0		
OZMW-26S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	54		
OZMW-26I	20.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	1		
OZMW-26I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0		
OZMW-26D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	60		
OZMW-26D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0		

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall																	
Aquifer Zone				Shallow																	
Operable Unit				OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1
Sample Name				BBMW-22S	BBMW-22S	BBMW-22S	BBMW-22S	BBMW-27S	BBMW-34S	BBMW-34S	BBMW-34S	BBMW-34S	BBMW-34S	BBMW-37S	BBMW-37S	BBMW-37S	BBMW-37S	BBMW-38S	BBMW-38S	BBMW-38S	BBMW-39S
Start Depth				5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
End Depth				10	10	10	10	15	15	15	15	15	15	10	10	10	10	15	15	15	15
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				7/15/2021	11/8/2021	2/16/2022	6/8/2022	2/11/2022	8/11/2021	10/14/2021	2/7/2022	6/15/2022	8/18/2021	10/25/2021	2/9/2022	6/15/2022	8/12/2021	10/25/2021	2/1/2022	6/15/2022	8/11/2021
Parent Sample Code																					
Analyte	Units	CAS no.	NYS AWQS																		
BTEX	µg/L																				
Benzene		71-43-2	1	12	17	13	16	1 U	33	110	32	22	1 U	1 U	1 U	1 U	3	5.4	5.3	4.3	54
Toluene		108-88-3	5	1.9 J	3.1 J	2.7 J	2.8 J	1 U	0.53 J	1.5	1	1 U	1 U	1 U	1 U	1 U	1 U	0.55 J	1 U	1 U	0.49 J
Ethylbenzene		100-41-4	5	800	1,300	1,100	970	1 U	1 U	0.41 J	3.2	1 U	0.82 J	0.78 J	0.43 J	1 U	0.43 J	1 U	42	14	4.3
o-Xylene		95-47-6	5	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	450	620	560	420	NA	2 U	1.1 J	3	2 U	5.5	4.9	3.1	1.5 J	2 U	2 U	7.1	2.7	3.3
Total BTEX (ND=0)		TBTEX_ND0	NE	1,263.90	1,940.10	1,675.70	1,408.80	ND	33.53	113.01	39.2	22	6.32	5.68	3.53	1.5	3.43	5.4	54.95	21	62.09
PAH17	µg/L																				
Acenaphthene		83-32-9	20*	23	72	120	89	10 U	28	40	38	33	10 U	1.7 J	10 U	10 U	10 U	10 U	10 U	10 U	3.1 J
Acenaphthylene		208-96-8	NE	1 J	8.4 J	2 J	1.9 J	10 U	0.94 J	1.4 J	1.7 J	1.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene		120-12-7	50*	2.4 J	4 J	7.9 J	5.7 J	10 U	10 U	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)anthracene		56-55-3	0.002*	1 U	1 U	0.69 J	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 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	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	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	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	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	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	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	1.9 J	2.5 J	2.5 J	1.6 J	10 U	1.5 J	1.8 J	1.7 J	1.4 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	15	26	47	31	10 U	16	25	18	6.4 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.3 J
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 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	2.4 J	530	0.76 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	2 U	2 U	1,000	2 U	2 U	2 U	2 U	2 U	2 U	4.9	2 U	2 U	2 U	2 U	2 U	43	25	0.97 J
Phenanthrene		85-01-8	50*	10 U	4.6 J	41	22	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene		129-00-0	50*	2.2 J	2.4 J	3.5 J	3.1 J	10 U	1.7 J	2 J	2.1 J	2 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	45.5	122.3	1,754.59	155.06	ND	48.14	70.2	61.5	44	4.9	1.7	ND	ND	ND	ND	46.7	26.9	5.37
Other																					
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall																				
Aquifer Zone				Shallow																				
Operable Unit	Sample Name	Start Depth	End Depth	Depth Unit	Sample Date	Parent Sample Code	OU1	OU1	OU1	OU1	OU2	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1			
							BMW-39S	BMW-39S	BMW-39S	BMW-40S	BMW-40S	BMW-40S	BMW-41S	BMW-41S	BMW-41S	BMW-41S	BMW-42S	BMW-42S	BMW-42S	BMW-42S	MW-05S	MW-05S	MW-05S	MW-05S
							5	5	5	5	5	5	6	6	6	6	5	5	5	5	4	4	4	4
							15	15	15	15	15	15	16	16	16	16	10	10	10	10	14	14	14	14
							ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
							10/14/2021	2/7/2022	4/7/2022	8/12/2021	11/1/2021	4/7/2022	8/11/2021	10/14/2021	2/1/2022	4/8/2022	8/9/2021	11/8/2021	2/9/2022	6/15/2022	7/14/2021	10/19/2021	1/13/2022	6/8/2022
Analyte	Units	CAS no.	NYS AWQS																					
BTEX	µg/L																							
Benzene		71-43-2	1	12	60	34	1 U	1 U	1 U	5 U	10 U	10 U	1.4 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.4	5.7	8.8	3.6
Toluene		108-88-3	5	1 U	0.45 J	1 U	1 U	1 U	5	6.6 J	5.4 J	4.4 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U
Ethylbenzene		100-41-4	5	1.8	18	5.4	1 U	2.8	1 U	2,000	2,500	1,900	2,000	1.4	1.3	1.7	0.76 J	380	580	440	310			
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	2 U	8.2	3.4	2 U	3	2 U	1,600	1,200	1,300	1,500	2.3	2.4	6	1.2 J	230	360	270	180			
Total BTEX (ND=0)		TBTEX_ND0	NE	13.8	86.65	42.8	ND	5.8	ND	3,605	3,706.60	3,205.40	3,505.80	3.7	3.7	9.3	1.96	618.4	945.7	718.8	493.6			
PAH17	µg/L																							
Acenaphthene		83-32-9	20*	2 J	10 U	10 U	10 U	10 U	10 U	200 U	3.3 J	2.9 J	2.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	39	39	50	23
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	200 U	1.5 J	1.2 J	1.4 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.7 J	10 U	20 U	10 U
Anthracene		120-12-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5.1 J	6.5 J	6.4 J	2.5 J
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	20 U	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 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	2 U	2 U	1.2 J	2 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	20 U	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 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 U	1	1.6	0.99 J	0.9 J	1 U	1 U	1 U	2 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 U	1 U	1 U	1 U	1 U	1 U	20 U	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 U	1 U
Fluoranthene		206-44-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.7 J	2.5 J	2 J	0.98 J
Fluorene		86-73-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	200 U	2.8 J	2.6 J	2.9 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	23	32	29	13
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	10 U	10 U	10 U	86 J	61 J	80	77	10 U	10 U	10 U	10 U	10 U	10 U	10 U	95	10 U	180	10 U
Naphthalene		91-20-3	10*	2 U	2 U	2 U	2 U	2 U	2 U	1,700	850	1,200	1,000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	74	2 U	370	2 U
Phenanthrene		85-01-8	50*	10 U	10 U	10 U	10 U	10 U	10 U	200 U	3.7 J	3.2 J	3.5 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	27	24	37	2.4 J
Pyrene		129-00-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.1 J	2.3 J	20 U	1.9 J
Total PAH (17) (ND=0)		TPAH17_ND0	NE	2	ND	ND	ND	ND	ND	1,786	922.3	1,289.90	1,087.60	1	2.8	0.99	0.9	268.6	106.3	674.4	43.78			
Other																								
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall																
Aquifer Zone				Shallow																
Operable Unit	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1
Sample Name	MW-09S	OU1PZ-101	OU1PZ-101	OU1PZ-101	OU1PZ-103	OU1PZ-103	OU1PZ-103	OZMW-23S	OZMW-23S	OZMW-23S	OZMW-23S	OZMW-23S	OZMW-24S	OZMW-24S	DUP-04	OZMW-24S	OZMW-24S	OZMW-24I	OZMW-25S	
Start Depth	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	
End Depth	14	14	14	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15	15	
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date	2/11/2022	10/19/2021	1/26/2022	5/11/2022	10/18/2021	2/9/2022	6/8/2022	8/9/2021	10/11/2021	1/3/2022	4/4/2022	8/12/2021	10/20/2021	10/20/2021	10/20/2021	1/11/2022	4/25/2022	10/20/2021	8/11/2021	
Parent Sample Code															OZMW-24S					
Analyte	Units	CAS no.	NYS AWQS																	
BTEX	µg/L																			
Benzene		71-43-2	1	1 U	5 U	2 U	5 U	0.58 J	1.1 J	0.49 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	12
Toluene		108-88-3	5	1 U	5 U	2 U	5 U	1.8	8.1	2.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.6
Ethylbenzene		100-41-4	5	1 U	1200	780	1,200	46	570	260	1 U	1 U	1 U	1 U	0.36 J	0.48 J	0.51 J	0.48 J	1 U	440
o-Xylene		95-47-6	5	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	NA	140	92	140	17	110	50	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	270
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	1340	872	1,340	65.38	689.2	313.09	ND	ND	ND	ND	0.36	0.48	0.51	0.48	ND	724.6
PAH17	µg/L																			
Acenaphthene		83-32-9	20*	10 U	13	6.6 J	14	6.4 J	7.9 J	10	10 U	10 U	10 U	10 U	2.6 J	10 U	10 U	10 U	10 U	76
Acenaphthylene		208-96-8	NE	10 U	1.5 J	10 U	1.8 J	10 U	10 U	0.98 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.4 J
Anthracene		120-12-7	50*	10 U	1.4 J	10 U	10 U	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	5.4 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	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	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	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	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	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	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	1 U	1 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.6 J
Fluorene		86-73-7	50*	10 U	8.8 J	3.3 J	7.7 J	2 J	4.3 J	4.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	34
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 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	46	2.2 J	44	10 U	2.9 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	24
Naphthalene		91-20-3	10*	2 U	390	10	590	0.75 J	110	3.1	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3
Phenanthrene		85-01-8	50*	10 U	8 J	10 U	5.6 J	10 U	1.7 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	40
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	10 U	10 U	10 U	10 U	2.5 J
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	468.7	22.1	663.1	9.15	126.8	19.48	ND	ND	ND	ND	2.6	ND	ND	ND	ND	187.9
Other																				
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall																	
Aquifer Zone				Shallow							Intermediate										
Operable Unit	Sample Name	Start Depth	End Depth	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1
		ft	ft	OZMW-25S	OZMW-25S	OZMW-25S	BBMW-20I	BBMW-20I	BBMW-20I	BBMW-20I	BBMW-22I	BBMW-22I	BBMW-22I	BBMW-22I	OZMW-21I2	OZMW-21I2	OZMW-21I2	OZMW-21I2	OZMW-24I	OZMW-24I	OZMW-24I
		ft	ft	11/1/2021	1/11/2022	4/8/2022	8/17/2021	12/21/2021	3/1/2022	6/15/2022	7/15/2021	11/8/2021	2/16/2022	6/9/2022	7/15/2021	11/8/2021	1/6/2022	6/8/2022	8/12/2021	10/20/2021	1/11/2022
Analyte	Units	CAS no.	NYS AWQS																		
BTEX	µg/L																				
Benzene		71-43-2	1	16	20	17	1 U	1 U	1 U	1 U	25	31	25	23	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	3.3	4.1	1.8 J	1 U	1 U	1 U	1 U	5.1	5	3.9	3.2	1 U	1 U	0.47 J	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	550	660	240	1 U	1 U	1 U	1 U	180	300	260	190	25	13	56	30	1 U	1 U	1 U
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	510	650	150	1.2 J	2 U	2 U	2 U	120	190	170	120	17	8.7	39	20	2 U	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	1,079.30	1,334.10	408.8	1.2	ND	ND	ND	330.1	526	458.9	336.2	42	21.7	95.47	50	ND	ND	ND
PAH17	µg/L																				
Acenaphthene		83-32-9	20*	42	69 J	97	3.2 J	2.2 J	1.9 J	10 U	130	150 J	190	160	160	140 J	220	230	10 U	10 U	10 U
Acenaphthylene		208-96-8	NE	1.5 J	10 U	1.8 J	27	18	5.2 J	10 U	2.1 J	500 U	2.1 J	1.8 J	27	500 U	20	23	10 U	10 U	10 U
Anthracene		120-12-7	50*	4.1 J	3.4 J	5.5 J	2.9 J	10 U	10 U	10 U	5.4 J	500 U	7.7 J	5.8 J	11	500 U	10	16	10 U	10 U	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	0.62 J	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	50 U	0.67 J	2.1	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	100 U	2 U	2 U	2 U	100 U	2 U	1 J	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	50 U	1 U	1 U	1 U	50 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	500 U	10 U	10 U	10 U	500 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	0.41 J	1 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	50 U	1 U	1.1	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	100 U	2 U	2 U	2 U	100 U	2 U	1.7 J	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	50 U	1 U	1 U	1 U	50 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	1.4 J	1.7 J	1.4 J	1.6 J	10 U	10 U	10 U	1.3 J	500 U	1.9 J	1.4 J	3.5 J	500 U	4.3 J	5.4 J	10 U	10 U	10 U
Fluorene		86-73-7	50*	24	49 J	46	12	6.8 J	5.6 J	10 U	41	46 J	52	46	67	56 J	72	79	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	100 U	2 U	2 U	2 U	100 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	320	10 U	19	10 U	10 U	840	1,200	1200	530	1,100	1,000	1,100	1,300	10 U	10 U	10 U
Naphthalene		91-20-3	10*	2 U	2 U	920	2 U	9.9	2 U	2 U	2,400	1,500	2,200	70	3,300	2,800	2,600	3,000	2 U	2 U	2 U
Phenanthrene		85-01-8	50*	26	33 J	39	13	6.8 J	3.5 J	10 U	35	500 U	47	35	62	500 U	66	82	10 U	10 U	10 U
Pyrene		129-00-0	50*	10 U	2.1 J	10 U	2 J	10 U	10 U	10 U	10 U	500 U	2.4 J	10 U	4 J	500 U	4.9 J	12	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	99	158.2	1,430.70	62.73	62.7	16.2	ND	3,454.80	2,896	3,703.10	850	4,734.50	3,996	4,097.87	4,753.30	ND	ND	ND
Other																					
Sulfate	ug/L	14808-79-8	250,000	NA	75,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall																
Aquifer Zone				Intermediate																
Operable Unit	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1
Sample Name	OZMW-241	OZMW-2412	OZMW-2412	OZMW-2412	DUP-02	OZMW-2412	BBMW-271	BBMW-341	BBMW-341	BBMW-341	BBMW-341	BBMW-341	BBMW-411	BBMW-411	DUP-05	BBMW-411	MW-05D	MW-05D	MW-05D	
Start Depth	20	35	35	35	45	35	30	25	25	25	30	30	25	25	25	25	35.5	35.5	35.5	
End Depth	30	45	45	45	45	45	40	30	30	30	30	30	30	30	30	30	45.5	45.5	45.5	
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date	4/25/2022	8/12/2021	10/20/2021	1/11/2022	1/11/2022	4/25/2022	3/11/2022	8/11/2021	10/14/2021	2/7/2022	6/15/2022	8/11/2021	2/1/2022	2/1/2022	4/8/2022	7/14/2021	10/19/2021	1/13/2022		
Parent Sample Code				OZMW-2412									BBMW-411	BBMW-411	BBMW-411					
Analyte	Units	CAS no.	NYS AWQS																	
BTEX	µg/L																			
Benzene		71-43-2	1	13	1 U	1 U	1 U	1 U	1 U	1 U	34	39 J	18	25	1 U	1 U	1 U	1 U	1 U	
Toluene		108-88-3	5	0.82 J	0.68 J	0.52 J	0.53 J	0.51 J	1 U	1 U	3.1	2.9 J	2.7	2.2	1 U	1 U	1 U	1 U	1 U	
Ethylbenzene		100-41-4	5	130	15	16	15	15	13	1 U	320	330 J	350	260	81	1	1 U	1 U	33	
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Xylene		1330-20-7	5	150	130	140	120	120	90	NA	190	200 J	220	160	63	2 U	2 U	2 U	17	
Total BTEX (ND=0)		TBTEX_ND0	NE	293.82	145.68	156.52	135.53	135.51	103	ND	547.1	571.9	590.7	447.2	144	1	ND	ND	50	
PAH17	µg/L																			
Acenaphthene		83-32-9	20*	43	78 J	71	100	94	120 J	10 U	110	94	96	90	10 U	10 U	10 U	10 U	170	
Acenaphthylene		208-96-8	NE	1.4 J	230	180	160	160	160 J	10 U	100 U	2 J	14	1.8 J	10 U	10 U	10 U	10 U	14	
Anthracene		120-12-7	50*	10 U	200 U	10	12	12	500 U	10 U	100 U	8.6 J	11	8.6 J	10 U	10 U	10 U	10 U	6.8 J	
Benzo(a)anthracene		56-55-3	0.002*	1 U	20 U	1 U	1 U	1 U	50 U	1 U	10 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	40 U	2 U	2 U	2 U	100 U	2 U	20 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	20 U	1 U	1 U	1 U	50 U	1 U	10 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	200 U	10 U	10 U	10 U	500 U	10 U	100 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	20 U	1 U	1 U	1 U	50 U	1 U	10 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	40 U	2 U	2 U	2 U	100 U	2 U	20 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	20 U	1 U	1 U	1 U	50 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Fluoranthene		206-44-0	50*	10 U	200 U	2.8 J	3.2 J	3 J	500 U	10 U	100 U	2.3 J	2.8 J	2.1 J	10 U	10 U	10 U	10 U	2.1 J	
Fluorene		86-73-7	50*	7.3 J	57 J	60	66	63	63 J	10 U	46 J	43	58	48	10 U	10 U	10 U	10 U	45	
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 U	40 U	2 U	2 U	2 U	100 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
2-Methylnaphthalene		91-57-6	NE	60	790	710	710	720	690	10 U	580	630 J	97	35	2 J	10 U	10 U	10 U	740	
Naphthalene		91-20-3	10*	190	2,900	4,300	3,300	3,300	4,600	2 U	220	920	1.8 J	2 U	41	2 U	2 U	2 U	300	
Phenanthrene		85-01-8	50*	10 U	65 J	54	61	60	500 U	10 U	60 J	48	57	46	10 U	10 U	10 U	10 U	39	
Pyrene		129-00-0	50*	10 U	200 U	3.2 J	4.2 J	4.1 J	500 U	10 U	100 U	2.5 J	3.5 J	2.9 J	10 U	10 U	10 U	10 U	2.9 J	
Total PAH (17) (ND=0)		TPAH17_ND0	NE	301.7	4,120	5,391	4,416.40	4,416.10	5,633	ND	1,016	1,950.40	341.1	234.4	43	ND	ND	ND	1,319.80	
Other																				
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall																	
Aquifer Zone				Intermediate																	
Operable Unit	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	
Sample Name	MW-05D	MW-09I	OZMW-23I	OZMW-23I	OZMW-23I	OZMW-23I	OZMW-23I2	OZMW-23I2	OZMW-23I2	OZMW-23I2	OZMW-25I	OZMW-25I	OZMW-25I	OZMW-25I	OZMW-25I2	OZMW-25I2	DUP-07	OZMW-25I2	OZMW-25I2		
Start Depth	35.5	30	20	20	20	20	35	35	35	35	20	20	20	20	30	30	35	35	35		
End Depth	45.5	40	30	30	30	30	45	45	45	45	30	30	30	30	45	45	45	45	45		
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft		
Sample Date	6/8/2022	2/11/2022	8/9/2021	10/11/2021	1/3/2022	4/4/2022	8/9/2021	10/11/2021	1/3/2022	4/4/2022	8/11/2021	11/1/2021	1/11/2022	4/8/2022	8/17/2021	8/17/2021	OZMW-25I2	11/1/2021	1/11/2022		
Parent Sample Code																					
Analyte	Units	CAS no.	NYS AWQS																		
BTEX	µg/L																				
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	1 U	0.25 J	1 U	1 U	1 U	1 U	27	23	22	24	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	1.8	2	1.7	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	200	200	220	210	0.44 J	0.46 J	0.37 J	1 U
o-Xylene		95-47-6	5	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	4.4	NA	2 U	2 U	2 U	1.6 J	2 U	2 U	2 U	1 U	120	120	130	130	0.92 J	0.95 J	1 J	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	16.4	ND	ND	ND	ND	1.85	ND	ND	ND	ND	348.9	344.8	374	365.7	1.36	1.41	1.37	ND
PAH17	µg/L																				
Acenaphthene		83-32-9	20*	190	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	170 J	130	130	140	12	10	14	11
Acenaphthylene		208-96-8	NE	13	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	6.2 J	10 U	5.1 J	41	40	38	39
Anthracene		120-12-7	50*	6.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	8.5 J	8.5 J	9.1 J	8.1 J	8 J	9.4 J	9.1 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	20 U	0.64 J	1 U	0.69 J	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	40 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	20 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	200 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	20 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	40 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	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	1.5 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	3.3 J	2.7 J	3.2 J	3.2 J	3.1 J	3.9 J	3.7 J
Fluorene		86-73-7	50*	43	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	57 J	45	52	55	32	30	32	36
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	40 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	860	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	750	550	33	720	7.8 J	5.3 J	2.1 J	10 U
Naphthalene		91-20-3	10*	240	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1,400	910	2 U	1,500	22	16	0.78 J	2 U
Phenanthrene		85-01-8	50*	38	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	64 J	50	50	55	53	52	55	49
Pyrene		129-00-0	50*	3.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	200 U	3.6 J	3.4 J	4.1 J	3.9 J	3.6 J	4.1 J	5.1 J
Total PAH (17) (ND=0)		TPAH17_ND0	NE	1,394.80	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,441	1,707.24	279.6	2,492.19	183	168	159.28	152.9
Other																					
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Intermediate										Upgradient of the Barrier Wall						Deep	
Aquifer Zone				OU1					OU1					OU1		OU1		OU1		OU1	
Operable Unit				OZMW-25I2	OZMW-26I2	OZMW-26I2	OZMW-26I2	OZMW-26I2	BBMW-05D	BBMW-05D	OZMW-23D	OZMW-23D	OZMW-23D	DUP-02	OZMW-23D	OZMW-24D	OZMW-24D	OZMW-24D	OZMW-24D	OZMW-24D	OZMW-24D
Sample Name				35	35	35	35	35	64	64	55	55	55	55	55	55	55	55	55	55	55
Start Depth				45	45	45	45	45	74	74	65	65	65	65	65	65	65	65	65	65	65
End Depth				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Depth Unit				5/10/2022	8/9/2021	12/6/2021	1/6/2022	6/1/2022	7/15/2021	3/2/2022	8/9/2021	10/11/2021	1/3/2022	10/11/21	4/4/2022	8/12/2021	10/20/2021	11/3/2021	1/11/2022	4/25/2022	10/11/2021
Sample Date				Parent Sample Code																	
Parent Sample Code																					
Analyte	Units	CAS no.	NYS AWQS																		
BTEX	µg/L																				
Benzene		71-43-2	1	1 U	1 U	3.3	0.71 J	1 U	20	14	1 U	1 U	1 U	1 U	1 U	0.94 J	0.69 J	NA	1.2	1.9	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	320	330	1 U	1 U	1 U	1 U	1 U	62	60	NA	75	110	1 U
Ethylbenzene		100-41-4	5	1 U	1 U	1 U	1 U	1 U	95	100	1 U	1 U	1 U	1 U	1 U	69	69	NA	65	65	1 U
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	2 U	2 U	2.6	2 U	1 U	670	840	2 U	2 U	2 U	2 U	1 U	610	570	NA	570	550	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND	5.9	0.71	ND	1,105	1,284	ND	ND	ND	ND	ND	741.94	699.69	NA	711.2	726.9	ND
PAH17	µg/L																				
Acenaphthene		83-32-9	20*	10 U	10 U	8.4 J	10 U	10 U	3 J	4.5 J	10 U	10 U	10 U	10 U	10 U	17 J	14	NA	13	500 U	10 U
Acenaphthylene		208-96-8	NE	10 U	10 U	1.8 J	10 U	10 U	57	62	10 U	10 U	10 U	10 U	10 U	290	230	NA	170	240 J	10 U
Anthracene		120-12-7	50*	10 U	10 U	10 U	10 U	10 U	1.3 J	3.8 J	10 U	10 U	10 U	10 U	10 U	100 U	9.3 J	NA	8 J	500 U	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	4.4	1 U	1 U	1 U	1 U	1 U	10 U	1 U	NA	1 U	50 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	2.7	2 U	2 U	2 U	2 U	2 U	20 U	2 U	NA	2 U	100 U	2 U
Benzo(k)fluoranthene		207-08-9	0.002*	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	10 U	1 U	NA	1 U	50 U	1 U
Benzo(g,h,i)perylene		191-24-2	NE	10 U	10 U	10 U	10 U	10 U	10 U	1.4 J	10 U	10 U	10 U	10 U	10 U	100 U	10 U	NA	10 U	500 U	10 U
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1 U	1 U	4.1	1 U	1 U	1 U	1 U	1 U	10 U	1 U	NA	1 U	50 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2 U	2 U	4.4	2 U	2 U	2 U	2 U	2 U	20 U	2 U	NA	2 U	100 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	10 U	1 U	NA	1 U	50 U	1 U
Fluoranthene		206-44-0	50*	10 U	10 U	10 U	10 U	10 U	1.1 J	4.9 J	10 U	10 U	10 U	10 U	10 U	100 U	1.4 J	NA	1.2 J	500 U	10 U
Fluorene		86-73-7	50*	10 U	10 U	10 U	10 U	10 U	8.5 J	12	10 U	10 U	10 U	10 U	10 U	55 J	53	NA	47	53 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	1.5 J	2 U	2 U	2 U	2 U	2 U	20 U	2 U	NA	2 U	100 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	10 U	10 U	51	36	10 U	10 U	10 U	10 U	10 U	740	680	NA	530	650	10 U
Naphthalene		91-20-3	10*	2 U	2 U	0.54 J	2 U	2 U	1,100	800	2 U	2 U	2 U	2 U	2 U	1,900	3,500	NA	2,200	3,200	2 U
Phenanthrene		85-01-8	50*	10 U	10 U	8.1 J	10 U	10 U	4.1 J	9.2 J	10 U	10 U	10 U	10 U	10 U	60 J	50	NA	43	500 U	10 U
Pyrene		129-00-0	50*	10 U	10 U	10 U	10 U	10 U	10 U	7.7 J	10 U	10 U	10 U	10 U	10 U	100 U	1.7 J	NA	10 U	500 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	18.84	ND	ND	1,226	959.6	ND	ND	ND	ND	ND	3,062	4,539.40	NA	3,012.20	4,143	ND
Other																					
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	250,000	NA	NA	NA	NA	NA	82,200	NA	86,600	NA	54,300	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient of the Barrier Wall											Outside and/or Downgradient of the Barrier Wall							
Aquifer Zone															Shallow							
Operable Unit	Sample Name	Start Depth	End Depth	OU1 OU1PZ-102	OU1 OU1PZ-102	OU1 OU1PZ-102	OU1 OU1PZ-102	OU1 OU1PZ-104	OU1 OU1PZ-104	OU1 OU1PZ-104	OU1 OU1PZ-104	OU1 OU1PZ-105	OU1 OU1PZ-105	OU1 DUP-03	OU1 OU1PZ-105	OU1 DUP-04	OU1 OU1PZ-105	OU1 OZMW-16S	OU1 OZMW-16S	OU1 OZMW-16S	OU1 OZMW-16S	OU1 OZMW-17S
Depth Unit	Sample Date	Parent Sample Code		8/11/2021	10/18/2021	1/26/2022	5/11/2022	8/11/2021	2/9/2022	6/8/2022	8/11/2021	10/18/2021	10/18/2021	10/18/2021	1/18/2022	1/18/2022	5/11/2022	7/30/2021	10/5/2021	1/3/2022	4/11/2022	8/2/2021
Analyte	Units	CAS no.	NYS AWQS																			
BTEX																						
Benzene	µg/L	71-43-2	1	4.5	2.7	0.33 J	1 U	1.4	1 U	0.38 J	2	1.3	1.3	0.38 J	0.41 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	2.7	2.8	1 U	1 U	0.85 J	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 U	1 U
Ethylbenzene		100-41-4	5	130	94	12	1 U	5.9	1 U	1 U	18	14	12	5.7	5.7	9.6	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	89	53	4.6	2 U	5.4	2 U	2 U	16	12	11	4.6	4	10	2 U	1 U	2 U	2 U	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	226.2	152.5	16.93	ND	13.55	ND	0.38	36	27.3	24.3	10.68	10.11	19.6	ND	ND	ND	ND	ND	ND
PAH17																						
Acenaphthene	µg/L	83-32-9	20*	11	14	10 U	8.1 J	4.4 J	4.9 J	2.7 J	2.3 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U				
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	0.91 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	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	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	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	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	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	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	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	1 U	1 U	1 U	1 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	2.6 J	3.6 J	10 U	3.5 J	10 U	0.93 J	1.6 J	1.3 J	10 U	10 U	10 U	10 U	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 U	2 U	2 U	2 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	16	10 U	10 U	17	15	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	74	33	2 U	2 U	2 U	2 U	2 U	32	0.62 J	9.6	31	27	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	50*	10 U	1.7 J	10 U	2.2 J	10 U	10 U	1.5 J	1.3 J	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	87.6	52.3	ND	ND	ND	ND	ND	62.71	5.02	15.43	53.8	46.9	ND	ND	ND	ND	ND	ND	ND
Other																						
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Outside and/or Downgradient of the Barrier Wall																	
Aquifer Zone				Shallow																	
Operable Unit	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	
Sample Name	OZMW-17S	OZMW-17S	DUP-02	OZMW-17S	OZMW-18S	OZMW-18S	OZMW-18S	OZMW-18S	OZMW-18S	OZMW-19S	OZMW-19S	OZMW-19S	OZMW-19S	OZMW-19S	OZMW-22SR	OU2MW-50S	OU2MW-50S	OU2MW-50S	OU2MW-50S	OU2MW-50S	
Start Depth	5	5	5	5	5	5	5	5	5	5	5	5	5	5	20	5	5	5	5	5	
End Depth	15	15	15	15	15	15	15	15	15	15	15	15	15	15	30	15	15	15	15	15	
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date	10/7/2021	4/12/2022	4/12/2022	1/4/2022	8/4/2021	10/13/2021	1/27/2022	4/21/2022	7/15/2021	11/3/2021	1/19/2022	4/25/2022	5/31/2022	7/22/2021	10/7/2021	1/6/2022	4/11/2022	8/6/2021			
Parent Sample Code			OZMW-17S																		
Analyte	Units	CAS no.	NYS AWQS																		
BTEX	µg/L																				
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.44 J	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	1 U	1 U	1 U	1 U	1 U	1 U	4.7	46	50	120	130	1 U	1 U	1 U	1 U	1 U	1 U	0.83 J
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	2 U	2 U	2 U	2 U	1 U	1 U	2 U	14	100	120	240	220	1.2 J	2 U	2 U	2 U	2 U	1.1 J
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	18.7	146.44	170.48	360	350.69	1.2	ND	ND	ND	ND	ND	1.93
PAH17	µg/L																				
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4.2 J	10 U	10 U				
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	3.7 J	3.4 J	10 U	10 U	10 U	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	10 U	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	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	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	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	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	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	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	1 U	1 U	1 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	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 U	2 U	2 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	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 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	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	10 U	10 U	10 U	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	1.8 J	10 U	10 U				
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	7.9	3.4	1.8	3.52	ND	ND	ND	ND	ND	ND
Other																					
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	24,400	NA	NA	NA	3,430 J	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Outside and/or Downgradient of the Barrier Wall																	
Aquifer Zone				Shallow							Intermediate										
Operable Unit	Sample Name	Start Depth	End Depth	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1
Sample Name	OU2MW-57S	OU2MW-57S	OU2MW-57S	OZMW-16I	OZMW-16I	OZMW-16I	OZMW-16I	OZMW-16I2	OZMW-16I2	OZMW-16I2	OZMW-16I2	OZMW-16I2	OZMW-16I2	OZMW-17I	OZMW-17I	OZMW-17I	OZMW-17I	OZMW-17I2	OZMW-17I2	OZMW-17I2	OZMW-17I2
Start Depth	5	5	5	20	20	20	20	35	35	35	35	35	35	20	20	20	20	35	35	35	35
End Depth	15	15	15	30	30	30	30	45	45	45	45	45	45	30	30	30	30	45	45	45	45
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date	10/7/2021	2/7/2022	4/5/2022	7/27/2021	10/5/2021	1/3/2022	4/11/2022	7/30/2021	10/5/2021	1/3/2022	4/12/2022	8/2/2021	10/7/2021	1/4/2022	4/12/2022	8/2/2021	10/7/2021	1/4/2022	4/12/2022	8/2/2021	10/7/2021
Parent Sample Code																					
Analyte	Units	CAS no.	NYS AWQS																		
BTEX	µg/L																				
Benzene		71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	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 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	1.5	0.57 J	1 U	1 U	1 U	1 U	1 U	1 U	0.94 J	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	5	1.7 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	15	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	3.2	0.57	ND	ND	ND	ND	ND	ND	0.94	16.71	ND	ND	ND	ND	4.1	ND	ND	ND
PAH17	µg/L																				
Acenaphthene		83-32-9	20*	2.5 J	1.4 J	3.2 J	10 U	10 U	18	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U				
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.1 J	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	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	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	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	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	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	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	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	1 U	1 U	1 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	10 U	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	2.5 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 U	2 U	2 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	10 U	0.98 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	2 U	0.7 J	1.5 J	2 U	2 U	0.79 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	50*	10 U	10 U	2.7 J	10 U	10 U	2.1 J	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	2.5	2.1	9.9	ND	ND	0.79	ND	ND	ND	22.18	ND	ND	ND	ND	ND	ND	ND	ND
Other																					
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				0																			
Aquifer Zone				Intermediate																			
Operable Unit				OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1		
Sample Name				OZMW-1712	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	OZMW-181	
Start Depth				35	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
End Depth				45	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				4/12/2022	8/4/2021	10/13/2021	1/27/2022	4/21/2022	8/4/2021	10/13/2021	1/27/2022	4/21/2022	7/15/2021	11/3/2021	1/19/2022	5/31/2022	7/15/2021	11/3/2021	1/19/2022	5/31/2022	7/22/2021		
Parent Sample Code																							
Analyte	Units	CAS no.	NYS AWQS																				
BTEX																							
Benzene	µg/L	71-43-2	1	1 U	1 U	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	3.2	7.7	17	7.2	12	11	5.5	1.1	1 U	
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 J	0.68 J	0.74 J	0.62 J	0.89 J	0.67 J	0.8 J	1 U	1 U	
Ethylbenzene		100-41-4	5	1 U	1 U	1 U	1 U	0.84 J	0.34 J	1 U	1 U	1 U	1 U	46	34	43	45	95	49	110	56	1 U	
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Xylene		1330-20-7	5	2 U	1 U	1 U	2 U	22	0.47 J	1 U	2 U	2 U	2 U	27	18	27	24	48	35	55	23	2 U	
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND	ND	ND	24.44	0.81	ND	ND	ND	ND	76.73	60.38	87.74	76.82	155.89	95.67	171.3	80.1	ND	
PAH17																							
Acenaphthene	µg/L	83-32-9	20*	10 U	10 U	10 U	10 U	1.7 J	2.5 J	2.2 J	10 U	10 U	10 U	150	29	170	130	50	50	81	14	10 U	
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	3.7 J	1.5 J	10 U	10 U	1.1 J	2.7 J	10 U	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	10 U	10 U	7.6 J	10 U	12	7.8 J	1.9 J	4.3 J	4.5 J	2.5 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	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	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Benzo(g,h,i)perylene		191-24-2	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	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	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	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Dibenz(a,h)anthracene		53-70-3	NE	1 UJ	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 U	1 U	1 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	10 U	10 U	4.1 J	3 J	4.4 J	2.8 J	2.4 J	2.8 J	2.5 J	1.6 J	10 U	
Fluorene		86-73-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	69	15	75	53	6.4 J	19	19	6 J	10 U	
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 UJ	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 U	2 U	2 U	2 U	2 U	2 U	
2-Methylnaphthalene		91-57-6	NE	10 U	10 U*	10 UJ	10 U	10 U	10 U*	10 UJ	10 U	10 U	10 U	0.57 J	10 U	10 U	220	10 U	10 U	16	10 U		
Naphthalene		91-20-3	10*	2 U	2 U*	2 U	2 U	2 U	4.6	15	2 U	2 U	2 U	0.58 J	2 U	2 U	240	2 U	2 U	2.6	2 U		
Phenanthrene		85-01-8	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	73	10 U	96	58	10 U	41	53	15	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	5.1 J	4.1 J	6.2 J	3.9 J	3.3 J	4.1 J	3.7 J	2.3 J	10 U	
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	ND	ND	1.7	7.1	18.12	ND	ND	ND	313.65	52.6	363.6	715.5	65.1	123.9	182.3	41.4	ND	
Other																							
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Outside and/or Downgradient of the Barrier Wall																
Aquifer Zone				Intermediate														Deep		
Operable Unit	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1
Sample Name	OU2MW-501	OU2MW-501	OU2MW-501	OU2MW-5012	OU2MW-5012	DUP-01	OU2MW-5012	OU2MW-5012	OU2MW-571	OU2MW-571	OU2MW-571	OU2MW-571	OU2MW-571	OU2MW-5712						
Start Depth	25	25	25	45	45	45	45	45	20	20	20	20	20	35	35	35	35	35	35	35
End Depth	30	30	30	50	50	50	50	50	30	30	30	30	30	45	45	45	45	45	45	45
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date	10/7/2021	1/6/2022	4/11/2022	7/22/2021	10/7/2021	10/7/2021	1/6/2022	4/11/2022	8/5/2021	10/7/2021	2/7/2022	4/5/2022	8/6/2021	10/8/2021	2/7/2022	4/5/2022	7/30/2021	10/5/2021		
Parent Sample Code						OU2MW-5012														
Analyte	Units	CAS no.	NYS AWQS																	
BTEX	µg/L																			
Benzene		71-43-2	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	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	0.72 J	0.73 J	0.46 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.68 J
Ethylbenzene		100-41-4	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 U	1 U	1 U	1 U	1 U
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylene		1330-20-7	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	2 U	2 U	2 U	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND	ND	ND	0.72	0.73	0.46	ND	ND	0.84	ND	ND	ND	ND	ND	ND	0.68
PAH17	µg/L																			
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	10 U	10 U	10 U	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	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	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	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	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	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	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	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	1 U	1 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	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 U	2 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	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 U	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	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	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40.4	ND	4	ND	ND	ND	ND
Other																				
Sulfate	ug/L	14808-79-8	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4-3. OU-1 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Outside and/or Downgradient of the Barrier Wall															
Aquifer Zone				Deep															
Operable Unit	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	OU1	
Sample Name	OZMW-16D	OZMW-16D	OZMW-17D	OZMW-17D	OZMW-17D	OZMW-17D	OZMW-17D	OZMW-17D	OZMW-17D	OZMW-18D	OZMW-18D	OZMW-18D	OZMW-18D	OZMW-19D	OZMW-19D	OZMW-19D	OZMW-19D	OZMW-19D	
Start Depth	55	55	53	53	53	53	53	53	53	55	55	55	55	55	55	55	55	55	
End Depth	65	65	63	63	63	63	63	63	63	65	65	65	65	60	60	60	60	60	
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date	1/3/2022	4/12/2022	8/2/2021	10/8/2021	11/3/2021	1/4/2022	4/21/2022	8/4/2021	10/13/2021	1/27/2022	4/21/2022	5/31/2022	7/22/2021	10/7/2021	1/6/2022	4/11/2022			
Parent Sample Code																			
Analyte	Units	CAS no.	NYS AWQS																
BTEX	µg/L																		
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	NA	1 U	1 U	0.99 J	0.45 J	0.85 J	1 U	1 U	1 U	1 U	1 U	
Toluene		108-88-3	5	0.93 J	1 U	1 U	7.1	NA	12	1 U	21	8.4	32	6.8	1 U	1 U	1 U	1 U	
Ethylbenzene		100-41-4	5	1 U	1 U	8.5	29	NA	22	3.9	13	21	18	9.6	1 U	1 U	1 U	1 U	
o-Xylene		95-47-6	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
m/p-Xylene		179601-23-1	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Xylene		1330-20-7	5	2 U	2 U	68	270	NA	170	30	66	170	85	39	2 U	2 U	2 U	2 U	
Total BTEX (ND=0)		TBTEX_ND0	NE	0.93	ND	76.5	306.1	NA	204	33.9	100.99	199.85	135.85	55.4	ND	ND	ND	ND	
PAH17	µg/L																		
Acenaphthene		83-32-9	20*	10 U	10 U	6.9 J	12	NA	7.9 J	3.6 J	200 U	32	5.8 J	2.4 J	10 U	10 U	10 U	10 U	
Acenaphthylene		208-96-8	NE	10 U	10 U	83	170	NA	66	15	85 J	160	54	21	10 U	10 U	10 U	10 U	
Anthracene		120-12-7	50*	10 U	10 U	2.2 J	2.7 J	NA	2.4 J	10 U	200 U	2.4 J	2.1 J	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	NA	1 U	1 U	20 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	NA	2 U	2 U	40 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	NA	1 U	1 U	20 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	NA	10 U	10 U	200 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	NA	1 U	1 U	20 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	NA	2 U	2 U	40 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	NA	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Fluoranthene		206-44-0	50*	10 U	10 U	10 U	10 U	NA	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Fluorene		86-73-7	50*	10 U	10 U	9.2 J	20	NA	12 *	3.9 J	200 U	8.9 J	1.5 J	10 U	10 U	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	NA	2 U	2 U	40 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	150	240	NA	100	5.1 J	41 J	130 J	10	1.3 J	10 U	10 U	10 U	10 U	
Naphthalene		91-20-3	10*	2 U	2 U	810	1,700	NA	990	6.9	1,200	3,000	550	240	6.7	2 U	2 U	2 U	
Phenanthrene		85-01-8	50*	10 U	10 U	17	18	NA	17	3 J	200 U	18	12	1.7 J	10 U	10 U	10 U	10 U	
Pyrene		129-00-0	50*	10 U	10 U	10 U	10 U	NA	10 U	10 U	200 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	1,078.30	2,162.70	NA	1,195.30	37.5	1,326	3,351.30	635.4	266.4	6.7	ND	ND	ND	
Other																			
Sulfate	ug/L	14808-79-8	250,000	NA	NA	30,800	NA	42,100	NA	30,200	47,500	58,500	NA	35,300	NA	NA	NA	NA	

Table 4-4. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																							
		Sample Date																							
		1999	2002				2003			2004				2005				2006				2007			
Oct/Nov	Apr/May	Jun/Jul	Nov/Dec	Feb/Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec			
BBMW-01S	5.0 - 15.0	270	219	--	3,440	2,000	2,500	2,661	3,510	1,988	1,576	2,520	1,930	1,085	1,080	1,090	273	59	1,361	2,329	949	3,640	7,420	5,590	
BBMW-01I	32.0 - 42.0	3	222	--	230	710	460	350	190	170	170	93	220	230	120	120	43	94	110	110	77	156	375	274	
BBMW-01D	68.5 - 78.5	214	542	--	--	--	1,294	1,193	293	265	304	94	191	585	112	32	24	216	462	109	32	555	386	9	
BBMW-23S	5.0 - 15.0	--	--	32,850	43,650	22,100	34,485	20,162	20,573	21,133	20,954	6,284	6,047	29,430	3,300	1,725	7,450	4,070	6,558	120	12,332	18,185	19,818	14,940	
BBMW-23I	33.0 - 43.0	--	--	0	--	0	0	0	0	0	0	0	--	0	0	--	0	0	0	0	0	0	19	10	
BBMW-23D	49.5 - 59.5	--	--	10	17	15	53	45	10	12	136	71	234	446	210	--	729	467	509	579	519	96	1,324	660	
BBMW-23D2	63.0 - 73.0	--	--	28	--	0	97	80	0	--	0	--	0	--	--	--	0	--	--	--	0	0	0	0	
OU2MW-17S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-17I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-17I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-17D	60.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-18I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-18I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-18D	60.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54D	60.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-58S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-58I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-4. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sample Date																			
		2008				2009				2010				2011				2012			
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	
BBMW-01S	5.0 - 15.0	4,210	3,022	1,251	797	284	43	29	187	23	38	4	11	2	2	1	0	0	0	0	--
BBMW-01I	32.0 - 42.0	262	64	57	36	47	66	29	19	76	11	0	3	1	0	0	0	0	0	0	--
BBMW-01D	68.5 - 78.5	43	81	75	21	33	47	115	105	213	83	72	58	32	11	94	20	26	2	124	0
BBMW-23S	5.0 - 15.0	26,389	22,830	18,758	9,986	11,860	6,483	11,108	7,779	9,643	11,441	6,213	4,890	4,327	4,104	654	3,771	3,509	3,718	2,569	2,477
BBMW-23I	33.0 - 43.0	0	3	0	0	0	0	0	115	0	6	0	3	0	17	0	0	0	41	0	0
BBMW-23D	49.5 - 59.5	493	23	12	14	7	10	6	3	2	1	0	1	0	0	0	50	44	0	0	2
BBMW-23D2	63.0 - 73.0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-17S	5.0 - 10.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-17I	13.0 - 23.0	--	90	0	0	80	164	17	0	6	245	4	0	0	2	19	3	10	0	0	1
OU2MW-17I2	35.0 - 45.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-17D	60.0 - 75.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-18I	13.0 - 23.0	--	5,500	5,447	27,560	28,040	3,791	1,500	3,275	3,033	799	1,592	2,468	2,559	1,739	2,190	126	6	0	2	4
OU2MW-18I2	35.0 - 45.0	--	0	0	0	0	0	0	336	418	490	575	410	200	315	568	298	96	66	21	24
OU2MW-18D	60.0 - 70.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0
OU2MW-54S	5.0 - 15.0	--	--	--	--	--	--	--	--	85	59	4	0	0	0	0	0	0	0	0	--
OU2MW-54I	20.0 - 25.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-54I2	40.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-54D	60.0 - 65.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-58S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--
OU2MW-58I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	2	0	0	0	0	0	0	--

Table 4-4. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
 Upgradient of Subsurface Barrier Wall
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sample Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-01S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-01I	32.0 - 42.0	--	3	--	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	
BBMW-01D	68.5 - 78.5	9	7	5	6	4	10	125	2	6	7	117	5	5	2	36	2	8	2	6	9
BBMW-23S	5.0 - 15.0	1,667	5,214	1,156	1,787	1,418	1,866	1,317	1,730	2,205	1,854	582	573	183	1,962	922	192	42	1,385	542	68
BBMW-23I	33.0 - 43.0	0	100	49	0	0	0	0	0	--	6	--	0	--	0	0	0	0	1	0	0
BBMW-23D	49.5 - 59.5	0	0	--	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	--
BBMW-23D2	63.0 - 73.0	--	0	--	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	--
OU2MW-17S	5.0 - 10.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-17I	13.0 - 23.0	7	3	0	3	0	0	0	0	2	0	--	--	--	0	--	--	--	--	--	--
OU2MW-17I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-17D	60.0 - 75.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-18I	13.0 - 23.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-18I2	35.0 - 45.0	19	27	3	7	0	0	5	0	0	0	--	--	--	--	--	--	--	--	--	0
OU2MW-18D	60.0 - 70.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54I	20.0 - 25.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54I2	40.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54D	60.0 - 65.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-58S	5.0-15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-58I	25.0-30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-4. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sample Date																Same Date							
		2018				2019				2020				2021				2022	Apr-Jun						
		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun							
BBMW-01S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	7,420	1,335	0	0	
BBMW-01I	32.0 - 42.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	710	95	0	0	
BBMW-01D	68.5 - 78.5	6	0.54	3	1	6	1	4	--	2	1	1	3	3	6	3	0	1	0	1,294	119	0	6		
BBMW-23S	5.0 - 15.0	21	270.51	41	110	51	3,208	945	896	463	544	574	1,705	236	853	1,007	787	45	21	43,650	7,492	45	1,007		
BBMW-23I	33.0 - 43.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	0	115	6	0	0		
BBMW-23D	49.5 - 59.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,324	151	0	0		
BBMW-23D2	63.0 - 73.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	97	6	0	0		
OU2MW-17S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-17I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	245	22	0	0		
OU2MW-17I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-17D	60.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-18I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	28,040	4,074	0	0		
OU2MW-18I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	0	575	121	0	0		
OU2MW-18D	60.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	9	0	0	0		
OU2MW-54S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	85	11	0	0		
OU2MW-54I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-54I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-54D	60.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-58S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
OU2MW-58I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0		

Notes for groundwater tables are compiled at the end of the Tables in this section.

Table 4-5. OU-2 Summary of Historical Total PAH Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																							
		Sampling Date																							
		1999	2002				2003			2004				2005				2006				2007			
Oct/Nov	Apr/May	Jun/Jul	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec			
BBMW-01S	5.0 - 15.0	2,055	3,420	--	2,823	600	1,102	1,730	2,077	1,394	869	1,565	2,067	1,333	1,034	2,425	1,043	0	956	2,158	659	4,347	3,927	3,929	
BBMW-01I	32.0 - 42.0	66	9,720	--	10,616	5,600	6,398	8,514	7,772	7,709	4,679	9,754	9,659	7,734	10,674	8,276	3,679	6,746	7,141	10,165	5,812	7,721	8,946	8,071	
BBMW-01D	68.5 - 78.5	1,605	4,566	--	--	--	4,871	4,543	1,460	1,800	1,359	429	821	2,832	50	251	349	863	2,250	425	195	2,090	1,248	50	
BBMW-23S	5.0 - 15.0	--	--	2,397	2,681	1,400	2,319	2,383	1,288	1,733	2,220	599	921	1,830	994	890	1,410	959	759	2,521	1,741	2,519	1,785	2,703	
BBMW-23I	33.0 - 43.0	--	--	0	--	178	0	61	0	0	0	0	--	13	33	--	146	88	65	59	199	2,207	2,559	31	
BBMW-23D	49.5 - 59.5	--	--	741	802	910	1,203	1,562	468	400	1,081	931	1,493	1,665	2,161	--	2,459	2,391	2,994	2,353	2,591	6,619	5,835	5,620	
BBMW-23D2	63.0 - 73.0	--	--	36	--	0	120	0	0	--	0	--	0	--	--	--	0	--	--	--	0	0	1	0	
OU2MW-17S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-17I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-17I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-17D	60.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-18I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-18I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-18D	60.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-54D	60.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-58S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-58I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-5. OU-2 Summary of Historical Total PAH Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		2008				2009				2010				2011				2012			
		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
BBMW-01S	5.0 - 15.0	1,432	1,640	1,991	142	359	119	0	126	46	63	44	42	36	3	50	21	2	1	0	--
BBMW-01I	32.0 - 42.0	10,403	6,532	8,764	5,806	3,303	10,202	5,703	5,737	5,463	3,303	904	431	1,714	508	0	0	0	0	0	--
BBMW-01D	68.5 - 78.5	55	183	274	13	68	92	141	220	273	248	135	134	103	0	423	73	88	58	418	11
BBMW-23S	5.0 - 15.0	2,569	2,169	1,838	1,340	1,673	2,456	3,162	2,697	1,571	2,292	948	976	71	427	224	389	519	437	436	429
BBMW-23I	33.0 - 43.0	16	14	23	0	12	2	0	237	2	1	0	0	0	0	2	0	0	6	0	0
BBMW-23D	49.5 - 59.5	3,118	188	95	0	0	31	1	27	5	14	15	12	0	0	0	0	17	9	6	7
BBMW-23D2	63.0 - 73.0	2	50	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	--
OU2MW-17S	5.0 - 10.0	--	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-17I	13.0 - 23.0	--	25	2	0	0	24	6	2	1	0	0	0	0	0	4	0	2	2	3	2
OU2MW-17I2	35.0 - 45.0	--	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-17D	60.0 - 75.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
OU2MW-18I	13.0 - 23.0	--	2,957	3,489	5,188	4,932	5,201	4,006	2,881	4,150	1,283	1,745	1,446	3,965	1,337	1,164	57	141	78	23	14
OU2MW-18I2	35.0 - 45.0	--	0	0	0	0	0	0	0	490	0	30	757	0	0	521	0	46	12	4	2
OU2MW-18D	60.0 - 70.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	0
OU2MW-54S	5.0 - 15.0	--	--	--	--	--	--	--	--	41	10	0	0	0	0	0	0	0	0	0	--
OU2MW-54I	20.0 - 25.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-54I2	40.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-54D	60.0 - 65.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--
OU2MW-58S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	2	0	0	0	--
OU2MW-58I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	3	0	0	0	--

Table 4-5. OU-2 Summary of Historical Total PAH Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-01S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-01I	32.0 - 42.0	--	623	--	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-01D	68.5 - 78.5	30	30	33	16	6	11	364	9	11	13	169	5	5	3	61	0	12.6	2	15	18
BBMW-23S	5.0 - 15.0	460	525	380	725	243	187	96	281	229	166	131	204	28	243	136	14	12.7	225	140	15
BBMW-23I	33.0 - 43.0	0	10	12	0	0	0	0	0	--	0	--	0	--	0	0	0	0	3	0	1
BBMW-23D	49.5 - 59.5	7	5	--	4	--	4	--	--	--	--	--	3	--	--	--	--	--	--	--	--
BBMW-23D2	63.0 - 73.0	--	0	--	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	--
OU2MW-17S	5.0 - 10.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-17I	13.0 - 23.0	3	2	2	2	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU2MW-17I2	35.0 - 45.0	--	0	--	--	--	17	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-17D	60.0 - 75.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-18I	13.0 - 23.0	7	7	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-18I2	35.0 - 45.0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	0
OU2MW-18D	60.0 - 70.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54I	20.0 - 25.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54I2	40.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-54D	60.0 - 65.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-58S	5.0-15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-58I	25.0-30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-5. OU-2 Summary of Historical Total PAH Groundwater Analytical Results
Upgradient of Subsurface Barrier Wall
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020				2021				2022						
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								
BBMW-01S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4,347	1,108	0	0			
BBMW-01I	32.0 - 42.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	10,674	4,210	0	0			
BBMW-01D	68.5 - 78.5	18	1.3	10	3	9	3	8	--	6	0	2	1,575	3	3	2	0	4,871	521	0	3			
BBMW-23S	5.0 - 15.0	0	0	1	2	0	148	42	10	16	53	2	124	0	81	75	4	3,162	912	2	81			
BBMW-23I	33.0 - 43.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	0	2,559	105	0	0			
BBMW-23D	49.5 - 59.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	6,619	1,063	0	0			
BBMW-23D2	63.0 - 73.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	120	6	0	0			
OU2MW-17S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0			
OU2MW-17I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	25	3	0	0			
OU2MW-17I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	0	17	1	0	0			
OU2MW-17D	60.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4	0	0	0			
OU2MW-18I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5,201	2,003	0	0			
OU2MW-18I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	0	757	58	0	0			
OU2MW-18D	60.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	13	1	0	0			
OU2MW-54S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	41	4	0	0			
OU2MW-54I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0			
OU2MW-54I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0			
OU2MW-54D	60.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0			
OU2MW-58S	5.0-15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0			
OU2MW-58I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	0	0			

Notes for groundwater tables are compiled at the end of the Tables in this section.

Table 4-6. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
 Mid-Plume Treatment Area
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sample Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-02S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-02I	30.0 - 40.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-02D	73.0 - 83.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-15S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-15I	23.0 - 28.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-15I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-15D	70.0 - 80.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-16S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-16I	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-16D	68.0 - 78.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-24S	4.0 - 14.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-24I	32.0 - 42.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-24D	59.5 - 69.5	3	1	2	--	--	5	--	--	--	2	--	--	--	--	--	--	--	--	--	
GM-03S	6.78 - 21.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GM-03I	30.03 - 45.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GM-03D	53.18 - 68.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-16AS	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-08WT	3.0 - 8.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-08S	20.0 - 25.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-08I	35.0 - 40.0	0	0	0	0	0	0	--	--	0	--	--	--	--	--	--	--	--	--	--	
OU2MW-08I2	50.0 - 55.0	90	61	42	21	18	31	15	26	23	22	15	4	2	2	2	0	--	0	--	
OU2MW-08D	65.0 - 70.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-19I	13.0 - 23.0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-19I2	35.0 - 45.0	0	4	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-19D	65.0 - 70.0	0	398	415	137	629	318	174	146	254	482	376	296	250	141	80	14	29	72	0	
OU2MW-20S	4.0 - 9.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-20I	13.0 - 23.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-20I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-20D	65.0 - 70.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-21S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-21I	13.0 - 23.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-21I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-22S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-22I	25.0 - 30.0	--	0	0	10	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-22I2	46.0 - 51.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-22D	67.0 - 72.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-23S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-23I	25.0 - 30.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-23I2	45.0 - 50.0	4	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-23D	65.0 - 70.0	--	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-24S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-24I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-24I2	45.0 - 50.0	66	347	162	106	467	67	98	41	55	0	0	0	0	0	0	--	--	--	0	
OU2MW-24D	62.0 - 67.0	--	2	0	--	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-25S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-25I	25.0 - 30.0	0	0	0	8	0	0	0	72	0	0	0	0	0	0	--	--	--	--	0	
OU2MW-25I2	45.0 - 50.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-25D	70.0 - 75.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-26S	6.0 - 11.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-26I	13.0 - 23.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-26I2	35.0 - 45.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-26D	60.0 - 70.0	16	1	4	1	0	0	--	--	--	1	--	--	--	--	--	--	--	--	--	
OU2MW-27S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-27I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-27I2	45.0 - 50.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-27D	65.0 - 70.0	--	0	0	0	0	0	--	--	--	2	--	--	--	--	--	--	--	--	--	
OU2MW-28S	5.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU2MW-28I	28.0 - 33.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	0	
OU2MW-28I2	40.0 - 45.0	6	2	0	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-29I	18.0 - 23.0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-29I2	30.0 - 35.0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	0	
OU2MW-29D	45.0 - 50.0	18	12	10	12	23	19	7	4	0	4	0	0	0	0	0	0	0	0	--	
OU2MW-30S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-30I	25.0 - 30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-30I2	30.0 - 35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	

Table 4-7. OU-2 Summary of Historical Total PAH Groundwater Analytical Results
 Mid-Plume Treatment Area
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		1992	1999			2002			2003			2004			2005			2006			
Sep	Sep	Oct/Nov	Jan/Feb	Apr/May	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	June	August	Nov/Dec	March	June	Jul/Aug	Nov/Dec	
BBMW-02S	5.0 - 15.0	--	--	2	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-02I	30.0 - 40.0	--	--	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-02D	73.0 - 83.0	--	--	2	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-15S	5.0 - 15.0	--	--	0	--	0	0	0	--	0	--	--	0	0	--	--	0	0	0	0	
BBMW-15I	23.0 - 28.0	--	--	30	--	0	0	0	--	0	--	--	0	--	--	--	--	--	0	--	
BBMW-15I2	35.0 - 45.0	--	--	3	--	0	0	0	--	0	--	--	0	--	--	--	--	--	0	--	
BBMW-15D	70.0 - 80.0	--	--	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-16S	5.0 - 15.0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-16I	35.0 - 45.0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-16D	68.0 - 78.0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-24S	4.0 - 14.0	--	--	--	--	11	--	0	--	908	--	120	0	10	0	--	0	0	0	0	
BBMW-24I	32.0 - 42.0	--	--	--	--	6,632	11,246	6,000	6,400	4,815	4,782	5,284	7,679	8,053	6,062	4,694	5,392	--	5,772	2,115	
BBMW-24D	59.5 - 69.5	--	--	--	--	7,412	--	6,000	5,800	8,110	3,194	1,070	360	392	3,232	5,652	5,372	--	3,037	4,055	
GM-03S	6.78 - 21.78	196	6	6	4	37	--	510	--	--	--	100	--	--	12	--	183	110	0	250	72
GM-03I	30.03 - 45.03	350	0	21	12	273	--	149	--	--	--	898	--	--	67	--	429	--	1,330	0	0
GM-03D	53.18 - 68.18	661	1,238	0	1	1	--	31	--	--	--	0	--	0	--	0	--	--	--	--	--
MW-16AS	3.0 - 13.0	--	--	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-08WT	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-08S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,204	--	9,968	7,000	4,974	8,445
OU2MW-08I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,453	--	4,983	4,020	2,328	3,013
OU2MW-08I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,364	--	1,666	2,664	1,347	1,961
OU2MW-08D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0
OU2MW-19I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-20S	4.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-20I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-20I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-20D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-21S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-21I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-21I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-22S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-22I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-22I2	46.0 - 51.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-22D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-23S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-23I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-23I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-23D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-24S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-24I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-24I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-24D	62.0 - 67.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-25S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-25I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-25I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-25D	70.0 - 75.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-26S	6.0 - 11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-26I	13.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-26I2	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-26D	60.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-27S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-27I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-27I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-27D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-28S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-28I	28.0 - 33.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-28I2	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-29I	18.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-29I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-29D	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Downgradient
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																					
		Sampling Date																					
		1992	1999			2000	2002			2003			2004			2005			2006				
Sep	Sep	Oct/Nov	Nov/Dec	Jan/Feb	Apr/May	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	June	August	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec		
BBMW-03S	3.0 - 13.0	--	--	0	--	2	0	--	--	--	--	0	0	--	--	0	--	0	0	0	0		
BBMW-03I	30.0 - 40.0	--	--	2	--	1	0	--	--	--	--	0	0	--	--	0	--	0	0	0	0		
BBMW-03D	52.0 - 62.0	--	--	3	--	3	0	--	--	--	--	0	0	--	--	0	--	0	0	0	0		
BBMW-07S	5.0 - 15.0	--	--	2	--	--	5	0	0	116	241	160	11	39	20	0	--	0	0	37	0		
BBMW-07I	30.0 - 40.0	--	--	0	--	--	0	0	--	--	--	--	--	--	0	--	--	--	--	--	--		
BBMW-07D	55.0 - 65.0	--	--	0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-25S	4.0 - 14.0	--	--	--	--	--	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BBMW-25I	25.0 - 35.0	--	--	--	--	--	1,034	533	1,330	980	1,707	1,304	936	865	1,007	1,995	--	1,082	1,360	264	0	79	344
BBMW-25D	62.0 - 72.0	--	--	--	--	--	45	--	59	75	44	29	20	0	110	78	--	47	--	11	21	78	76
GM-05S	5.1 - 20.1	0	422	283	124	27	106	307	87	367	0	0	157	0	134	0	40	57	140	21	0	12	12
GM-05I	35.05 - 48.05	0	0	2	0	0	0	0	0	--	0	--	0	0	--	--	--	0	--	--	--	--	--
GM-05D	60.95 - 75.95	0	0	0	0	0	0	--	--	--	--	--	0	--	--	--	--	0	--	--	--	--	--
GM-08S	6.35-21.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GM-08I	29.95-44.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GM-08D	48.25-63.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GMP-01	25.0 - 30.0	--	--	--	1,090	1,056	433	348	250	824	454	692	455	587	200	2,130	3,200	1,280	250	562	577	1,156	4,726
GMP-02	18.0 - 23.0	--	--	--	1,387	321	197	2,268	710	2,275	1,194	1,735	913	660	24	1,318	1,090	550	311	151	11	12	0
GMP-04	15.5 - 20.5	--	--	--	60	67	44	82	0	11	12	331	385	345	1,483	263	214	366	1,132	242	83	242	280
OU2MW-01S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-01WT	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-01S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,243	--	348	176	988	288	288	288
OU2MW-01I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	77	--	767	170	170	424	424	424
OU2MW-01I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25	--	195	126	52	51	51	51
OU2MW-01D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	0
OU2MW-02S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	--	181	111	282	573	573	573
OU2MW-02I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	477	--	370	415	493	459	459	459
OU2MW-02I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	--	0	0	0	0	0	0
OU2MW-02D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	0
OU2MW-03S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	151	--	530	234	225	206	206	206
OU2MW-03I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	182
OU2MW-03I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	0
OU2MW-03D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	0
OU2MW-04WT	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-04S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3,130	--	844	740	1,176	386	386	386

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
 Downgradient
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		1992	1999			2000	2002			2003			2004			2005			2006		
Sep	Sep	Oct/Nov	Nov/Dec	Jan/Feb	Apr/May	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	June	August	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec
OU2MW-04I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	267	--	885	296	23	0
OU2MW-04I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	41	--	32	0	0	0
OU2MW-04D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0
OU2MW-05	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,120	--	224	254	1,039	3,159
OU2MW-06S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-06	15.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,085	--	11	0	0	0
OU2MW-07S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-07	15.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	35	--	59	39	0	35
OU2MW-09	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0
OU2MW-10S	3.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-10I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-10D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-11S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-11I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-11I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-11D	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-12S	3.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-12I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-12I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-12D	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-13S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-13I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-13D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-14S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-14I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-14I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-15S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-15I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-15I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-15D	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-16S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-16I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-16I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-16D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-52S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-52I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-52D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-53S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-53I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-53D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Downgradient
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		2007				2008				2009				2010				2011			
Mar	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec														
BBMW-03S	3.0 - 13.0	393	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-03I	30.0 - 40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-03D	52.0 - 62.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-07S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-07I	30.0 - 40.0	--	0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-07D	55.0 - 65.0	25	0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-25S	4.0 - 14.0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-25I	25.0 - 35.0	0	150	252	41	158	169	101	523	469	301	46	18	6	0	0	0	0	0	0	
BBMW-25D	62.0 - 72.0	0	0	16	6	2	6	8	8	35	32	2	4	15	8	9	0	0	0	23	
GM-05S	5.1 - 20.1	0	2	0	14	185	55	16	113	8	36	11	6	8	7	13	2	0	0	1	
GM-05I	35.05 - 48.05	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GM-05D	60.95 - 75.95	0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
GM-08S	6.35-21.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GM-08I	29.95-44.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GM-08D	48.25-63.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GMP-01	25.0 - 30.0	185	169	49	135	182	94	170	655	762	869	432	372	535	247	93	37	68	7	12	
GMP-02	18.0 - 23.0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	3	0	0	0	0	
GMP-04	15.5 - 20.5	652	36	295	264	15	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
OU2IW-01S	3.0 - 8.0	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-01WT	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-01S	20.0 - 25.0	876	46	182	102	42	6	15	82	69	334	107	2	0	4	0	0	0	0	0	
OU2MW-01I	35.0 - 40.0	885	443	408	85	8	1	13	10	2	195	186	4	2	0	0	0	0	0	0	
OU2MW-01I2	50.0 - 55.0	51	31	0	0	0	0	0	0	0	0	3	1	0	47	14	10	0	0	0	
OU2MW-01D	65.0 - 70.0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	0	0	0	0	0	
OU2MW-02S	20.0 - 25.0	27	270	137	1	29	52	20	6	5	184	46	0	0	0	0	0	0	0	0	
OU2MW-02I	35.0 - 40.0	645	260	410	229	377	412	281	359	370	335	350	154	378	118	136	179	137	130	97	
OU2MW-02I2	50.0 - 55.0	0	0	0	1	11	0	2	1	3	2	0	0	0	0	0	0	0	0	0	
OU2MW-02D	65.0 - 70.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
OU2MW-03S	20.0 - 25.0	0	1,108	223	9	45	94	42	53	30	99	48	90	13	7	0	0	0	0	0	
OU2MW-03I	35.0 - 40.0	0	0	0	0	0	0	85	1,262	366	15	0	14	158	219	0	0	0	0	0	
OU2MW-03I2	50.0 - 55.0	11	29	0	0	0	0	0	0	5	38	10	8	2	0	0	0	0	0	0	
OU2MW-03D	65.0 - 70.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-04WT	3.0 - 8.0	--	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-04S	20.0 - 25.0	421	873	253	600	791	200	200	730	841	891	654	818	345	70	89	51	0	0	0	

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Downgradient
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		2007				2008				2009				2010				2011			
Mar	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec														
OU2MW-04I	35.0 - 40.0	134	244	252	158	174	25	67	120	97	198	28	22	68	68	17	34	123	121	115	136
OU2MW-04I2	50.0 - 55.0	0	5	0	0	0	0	0	0	0	189	1	0	63	36	7	0	0	0	0	8
OU2MW-04D	65.0 - 70.0	0	0	0	3	2	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0
OU2MW-05	25.0 - 35.0	280	188	110	202	221	158	181	514	466	290	369	242	94	137	139	51	30	8	18	11
OU2MW-06S	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-06	15.0 - 25.0	53	0	0	0	11	3	0	2	0	0	0	0	0	3	0	0	0	0	0	0
OU2MW-07S	3.0 - 8.0	--	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-07	15.0 - 25.0	0	3	0	1	15	3	3	0	0	2	0	0	4	53	0	0	0	0	0	0
OU2MW-09	30.0 - 40.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
OU2MW-10S	3.0 - 7.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-10I	20.0 - 25.0	--	3	0	278	906	14	10	143	76	33	32	36	0	41	529	326	140	192	13	2
OU2MW-10D	35.0 - 40.0	--	0	0	0	0	198	39	351	78	0	28	43	0	2	65	120	4	0	0	0
OU2MW-11S	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	0	0	0
OU2MW-11I	20.0 - 25.0	--	168	13	356	245	263	249	227	170	132	69	153	48	187	55	73	91	27	2	0
OU2MW-11I2	30.0 - 35.0	--	293	329	43	67	33	41	81	98	25	1	66	10	0	0	24	9	4	8	18
OU2MW-11D	40.0 - 45.0	--	3	0	0	0	0	0	8	5	20	18	26	56	39	1	14	19	92	1	1
OU2MW-12S	3.0 - 7.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-12I	20.0 - 25.0	--	466	143	70	70	81	78	62	107	48	139	96	77	13	35	121	60	5	0	0
OU2MW-12I2	30.0 - 35.0	--	30	2	7	23	2	0	0	53	19	7	58	0	2	37	3	26	5	0	3
OU2MW-12D	40.0 - 45.0	--	23	13	21	17	11	0	0	0	0	0	0	0	80	73	49	0	15	16	4
OU2MW-13S	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-13I	20.0 - 25.0	--	29	9	0	7	4	1	7	13	3	22	0	19	8	3	0	2	1	0	0
OU2MW-13D	35.0 - 40.0	--	4	27	5	0	10	10	0	34	13	29	23	9	10	8	24	10	2	1	0
OU2MW-14S	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-14I	20.0 - 25.0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-14I2	45.0 - 50.0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-15S	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-15I	20.0 - 25.0	--	795	32	1	40	8	6	14	0	63	175	3	0	0	73	6	12	83	0	0
OU2MW-15I2	30.0 - 35.0	--	0	599	367	0	0	0	0	0	0	0	0	0	0	184	0	0	0	0	0
OU2MW-15D	40.0 - 45.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-16S	3.0 - 8.0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU2MW-16I	15.0 - 20.0	--	79	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0
OU2MW-16I2	25.0 - 30.0	--	0	9	53	6	2	0	0	0	0	84	0	0	0	22	0	5	0	0	4
OU2MW-16D	35.0 - 40.0	--	0	0	0	149	0	0	1	0	2	0	0	0	0	0	0	0	0	0	20
OU2MW-52S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0
OU2MW-52I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	128	0	0	0	0	0	0	0	0	0	0
OU2MW-52D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0
OU2MW-53S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0
OU2MW-53I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0
OU2MW-53D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	0	0	0	2	0	0	0	0	0	0	3

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
 Downgradient
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		2012				2013				2014				2015				2016			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-03S	3.0 - 13.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-03I	30.0 - 40.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-03D	52.0 - 62.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-07S	5.0 - 15.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-07I	30.0 - 40.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-07D	55.0 - 65.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-25S	4.0 - 14.0	0	0	0	--	--	0	--	--	--	--	--	0	0	--	--	--	--	--	--	
BBMW-25I	25.0 - 35.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
BBMW-25D	62.0 - 72.0	1	1	0	0	0	0	0	0	0	0	0	0	--	--	0	--	--	--	--	
GM-05S	5.1 - 20.1	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
GM-05I	35.05 - 48.05	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
GM-05D	60.95 - 75.95	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
GM-08S	6.35-21.35	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	
GM-08I	29.95-44.95	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	
GM-08D	48.25-63.25	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	
GMP-01	25.0 - 30.0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0	--	--	--	--	
GMP-02	18.0 - 23.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
GMP-04	15.5 - 20.5	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2IW-01S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-01WT	3.0 - 8.0	0	0	0	--	--	0	--	--	--	--	--	0	0	--	--	--	--	--	--	
OU2MW-01S	20.0 - 25.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-01I	35.0 - 40.0	3	1	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-01I2	50.0 - 55.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-01D	65.0 - 70.0	1	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-02S	20.0 - 25.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
OU2MW-02I	35.0 - 40.0	61	50	56	46	32	11	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-02I2	50.0 - 55.0	0	2	0	0	0	0	3	6	8	1	2	2	0	0	0	0	0	0	1.6	
OU2MW-02D	65.0 - 70.0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
OU2MW-03S	20.0 - 25.0	0	0	0	--	--	0	--	--	--	--	--	0	0	--	--	--	--	--	--	
OU2MW-03I	35.0 - 40.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-03I2	50.0 - 55.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-03D	65.0 - 70.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-04WT	3.0 - 8.0	0	0	0	--	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	
OU2MW-04S	20.0 - 25.0	0	0	0	0	0	0	0	--	--	--	--	0	--	--	0	--	--	--	--	

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Downgradient
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																			
		Sampling Date																			
		2012				2013				2014				2015				2016			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
OU2MW-04I	35.0 - 40.0	118	70	35	32	22	20	5	17	14	6	9	6	4	0	0	12	2	2	3	0
OU2MW-04I2	50.0 - 55.0	0	0	0	0	0	0	2	--	--	3	--	--	--	0	--	--	--	0	--	
OU2MW-04D	65.0 - 70.0	0	0	0	--	--	0	0	--	--	0	--	--	--	0	--	--	--	--	--	
OU2MW-05	25.0 - 35.0	2	6	0	0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	
OU2MW-06S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-06	15.0 - 25.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-07S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-07	15.0 - 25.0	9	1	0	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-09	30.0 - 40.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-10S	3.0 - 7.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	0	--	--	
OU2MW-10I	20.0 - 25.0	0	0	0	3	2	0	0	0	0	0	--	--	1	--	--	--	114	--	--	
OU2MW-10D	35.0 - 40.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-11S	3.0 - 8.0	2	3	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-11I	20.0 - 25.0	0	3	1	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-11I2	30.0 - 35.0	18	3	14	0	0	0	0	12	--	0	--	--	0	--	--	--	--	--	--	
OU2MW-11D	40.0 - 45.0	5	87	50	10	5	15	0	50	0	0	0	0	0	0	0	0	0	1	--	
OU2MW-12S	3.0 - 7.0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-12I	20.0 - 25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-12I2	30.0 - 35.0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU2MW-12D	40.0 - 45.0	2	0	0	5	3	3	0	0	13	2	11	10	30	33	1	0	0	0	0	
OU2MW-13S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-13I	20.0 - 25.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-13D	35.0 - 40.0	8	0	3	3	2	0	0	0	--	0	--	--	0	--	--	--	--	--	--	
OU2MW-14S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-14I	20.0 - 25.0	0	0	261	--	194	13	0	31	27	90	0	0	0	0	0	0	0	--	--	
OU2MW-14I2	45.0 - 50.0	0	0	1	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-15S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-15I	20.0 - 25.0	0	9	279	18	4	0	0	0	0	0	--	--	0	--	--	--	--	--	--	
OU2MW-15I2	30.0 - 35.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-15D	40.0 - 45.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-16S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-16I	15.0 - 20.0	0	--	0	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-16I2	25.0 - 30.0	0	0	0	0	1	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-16D	35.0 - 40.0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-52S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	0	0	0	0	0	--	--	
OU2MW-52I	20.0 - 25.0	0	0	0	--	--	0	--	--	--	0	--	--	0	0	0	0	0	--	--	
OU2MW-52D	35.0 - 40.0	0	0	0	--	--	0	--	--	--	0	--	--	0	0	0	0	0	--	--	
OU2MW-53S	3.0 - 8.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-53I	20.0 - 25.0	0	0	0	--	0	--	--	--	--	0	--	--	--	--	--	--	--	--	--	
OU2MW-53D	35.0 - 40.0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
 Downgradient
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																				Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																								
		2017				2018				2019				2020				2021								
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun						
BBMW-03S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	0	393	11	0	0	
BBMW-03I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	0	2	0	0	0	
BBMW-03D	52.0 - 62.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	0	3	0	0	0	
BBMW-07S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	241	15	0	0	
BBMW-07I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
BBMW-07D	55.0 - 65.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	25	1	0	0	
BBMW-25S	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	58	1	0	0	
BBMW-25I	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,995	416	0	0	
BBMW-25D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	0	110	19	0	0	
GM-05S	5.1 - 20.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	422	60	0	0	
GM-05I	35.05 - 48.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	13	0	0	0	
GM-05D	60.95 - 75.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4	0	0	0	
GM-08S	6.35-21.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
GM-08I	29.95-44.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
GM-08D	48.25-63.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
GMP-01	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4,726	517	0	0	
GMP-02	18.0 - 23.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2,275	344	0	0	
GMP-04	15.5 - 20.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,483	157	0	0	
OU2IW-01S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
OU2MW-01WT	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
OU2MW-01S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,243	164	0	0	
OU2MW-01I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	885	128	0	0	
OU2MW-01I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	195	20	0	0	
OU2MW-01D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	72	2	0	0	
OU2MW-02S	20.0 - 25.0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	80	82	0	0	0	573	34	0	82	
OU2MW-02I	35.0 - 40.0	0	0	0	0	0	1.5	0	0	0	0	26	69	20	0	0	40	78	88	6	0	645	130	0	88	
OU2MW-02I2	50.0 - 55.0	1.5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	11	1	0	35	
OU2MW-02D	65.0 - 70.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
OU2MW-03S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,108	103	0	0	
OU2MW-03I	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,262	77	0	0	
OU2MW-03I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	38	3	0	0	
OU2MW-03D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
OU2MW-04WT	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	0	10	0	0	0	
OU2MW-04S	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	0	3,130	403	0	0	

Table 4-8. OU-2 Summary of Historical Total BTEX Groundwater Analytical Results
Downgradient
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentrations (µg/L)																				Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																								
		2017				2018				2019				2020				2021								
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun						
OU2MW-04I	35.0 - 40.0	0	0	--	--	--	--	--	0	--	--	--	--	0	--	--	--	--	--	--	0	885	83	0	0	
OU2MW-04I2	50.0 - 55.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	0	189	11	0	0
OU2MW-04D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	0	3	0	0	0
OU2MW-05	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3,159	280	0	0
OU2MW-06S	3.0 - 8.0	--	--	--	--	--	--	--	--	0	0	0	0	0	--	0	0	--	--	0	0	1,085	32	0	0	
OU2MW-06	15.0 - 25.0	--	--	--	--	--	--	--	--	0	0	0	0	0	--	0	0	--	--	0	0	1	0	0	0	
OU2MW-07S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	59	8	0	0
OU2MW-07	15.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0
OU2MW-09	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	0	1	0	0	0
OU2MW-10S	3.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-10I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	906	93	0	0
OU2MW-10D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	351	39	0	0
OU2MW-11S	3.0 - 8.0	--	--	--	--	--	--	--	--	0	0	0	0	0	--	0	0	--	--	--	0	3	0	0	0	
OU2MW-11I	20.0 - 25.0	--	--	--	--	--	--	--	--	0	0	0	0	0	--	0	0	--	--	--	0	356	82	0	0	
OU2MW-11I2	30.0 - 35.0	--	--	--	--	--	--	--	--	0	0	0	0	0	--	0	0	--	--	--	0	329	34	0	0	
OU2MW-11D	40.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0	0	0	--	0	0	--	--	--	0	92	12	0	0	
OU2MW-12S	3.0 - 7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
OU2MW-12I	20.0 - 25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	466	30	0	0	0
OU2MW-12I2	30.0 - 35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	5	0	0	0
OU2MW-12D	40.0 - 45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	8	0	0	0
OU2MW-13S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-13I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	29	5	0	0
OU2MW-13D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	34	8	0	0
OU2MW-14S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-14I	20.0 - 25.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	261	19	0	0
OU2MW-14I2	45.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0
OU2MW-15S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-15I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	795	54	0	0
OU2MW-15I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	599	48	0	0
OU2MW-15D	40.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-16S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-16I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	79	5	0	0
OU2MW-16I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	84	7	0	0
OU2MW-16D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	149	7	0	0
OU2MW-52S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-52I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	128	6	0	0
OU2MW-52D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-53S	3.0 - 8.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-53I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0
OU2MW-53D	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	0	0

Notes for groundwater tables are compiled at the end of the Tables in this section.

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Shallow																			
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2
Sample Name	BBMW-23S	BBMW-23S	BBMW-23S	BBMW-23S	OU2MW-06S	DUP-01	OU2MW-11S	OU2MW-12S	OU2MW-12S	OU2MW-12S	OU2MW-12S	OU2MW-12S	OU2MW-27S	DUP-08	OU2MW-27S	OU2MW-27S	OU2MW-27S	OU2MW-28S	OU2MW-28S	OU2MW-28S	OU2MW-28S	DUP-07	OU2MW-28S
Start Depth	5	5	5	5	3	3	3	3	3	3	3	3	5	5	5	5	5	5	5	5	5	5	5
End Depth	15	15	15	15	8	8	8	7	7	7	7	7	15	15	15	15	15	15	15	15	15	15	15
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date	7/27/2021	12/6/2021	2/9/2022	6/14/2022	7/8/2021	7/8/2021	7/12/2021	7/8/2021	10/13/2021	1/6/2022	4/5/2022	9/29/2021	9/29/2021	9/29/2021	12/21/2021	2/14/2022	6/1/2022	9/15/2021	12/20/2021	2/21/2022	2/21/2022	4/18/2022	
Parent Sample Code					OU2MW-06S	OU2MW-06S								OU2MW-27S							OU2MW-28S	OU2MW-28S	
Analyte	Units	CAS no.	NYS AWQS																				
BTEX	µg/L																						
Benzene		71-43-2	1	0.85 J	2.4	2.3	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 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	2.2	4.5	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 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	490	540	460	26	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 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5	360	460	320	19	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 U	2 U	2 U	2 U
Total BTEX		TBTEX_ND0	NE	853.05	1,006.90	786.8	45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH17	µg/L																						
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U					
Acenaphthylene		208-96-8	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	10 U	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	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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U					
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 UJ	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 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	1.9 J	3.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	79 J	72	4.4	1.6 J	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 U	2 U	2 U	2 U
Phenanthrene		85-01-8	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	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	10 U	10 U	10 U					
Total PAH (17)		TPAH17_ND0	NE	80.9	75.1	4.4	1.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other																							
Sulfate	ug/L	14808-79-8	250,000						9,730	11,500	9,800	5,890 J											

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Shallow													Shallow						
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2
Sample Name	OU2MW-30S	OU2MW-30S	OU2MW-30S	OU2MW-30S	OU2MW-30S	OU2MW-39S	OU2MW-39S	OU2MW-39S	OU2MW-39S	OU2MW-39S	OU2MW-40S	OU2MW-40S	OU2MW-40S	OU2MW-40S	OU2MW-41S	OU2MW-41S	OU2MW-41S	OU2MW-41S	OU2MW-41S	OU2MW-41S	OU2MW-47S	OU2MW-47S	OU2MW-47S
Start Depth	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
End Depth	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date	7/28/2021	9/28/2021	12/27/2021	1/17/2022	4/19/2022	8/10/2021	11/2/2021	11/10/2022	6/3/2022	9/27/2021	12/28/2021	3/2/2022	4/18/2022	9/16/2021	12/30/2021	2/22/2022	4/20/2022	8/16/2021	12/7/2021	1/18/2022	5/20/2022		
Parent Sample Code																							
Analyte	Units	CAS no.	NYS AWQS																				
	µg/L																						
BTEX																							
Benzene		71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	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	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX		TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH17																							
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U				
Acenaphthylene		208-96-8	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	10 U	10 U	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	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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U				
Naphthalene		91-20-3	10*	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 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U				
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other																							
Sulfate	ug/L	14808-79-8	250,000																				

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Intermediate																			Intern																					
Operable Unit				OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2																					
Sample Name				DUP-01	OU2MW-02S	OU2MW-02S	OU2MW-02S	OU2MW-02S	OU2MW-06	OU2MW-11I	OU2MW-12I	OU2MW-12I	OU2MW-12I	OU2MW-12I	OU2MW-12I	OU2MW-12I	DUP-05	OU2MW-02I	OU2MW-02I	OU2MW-11I2	OU2MW-11D	OU2MW-12I2	OU2MW-12I2	OU2MW-12I2																				
Start Depth				13	20	20	20	20	15	20	20	20	20	20	20	20	35	35	35	30	40	30	30	30																				
End Depth				23	25	25	25	25	25	25	25	25	25	25	25	25	40	40	40	40	35	45	35	35																				
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft																				
Sample Date				4/7/2022	8/18/2021	11/16/2021	1/10/2022	6/6/2022	7/8/2021	7/12/2021	7/8/2021	10/13/2021	1/6/2022	4/5/2022	8/17/2021	11/16/2021	11/16/2021	1/10/2022	6/6/2022	7/12/2021	7/12/2021	7/8/2021	10/13/2021	1/6/2022																				
Parent Sample Code				OU2MW-19I												OU2MW-02I																												
Analyte	Units	CAS no.	NYS AWQS																																									
BTEX																							µg/L																					
Benzene		71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U																					
Toluene		108-88-3	5	1 U	82	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	78	88	87	5.6	1 U	1 U	1 U	1 U	1 U																					
Ethylbenzene		100-41-4	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U																					
Total Xylene		1330-20-7	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	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U																					
Total BTEX		TBTEX_ND0	NE	ND	82	ND	ND	ND	ND	ND	ND	ND	ND	ND	78	88	87	5.6	ND	ND	ND	ND	ND																					
PAH17																							µg/L																					
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U																					
Acenaphthylene		208-96-8	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	10 U	10 U	10 U	10 U	10 U	10 U	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	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)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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U																					
Naphthalene		91-20-3	10*	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 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U																					
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND																					
Other																							ug/L																					
Sulfate		14808-79-8	250,000																																									
										5,390	2,620	2,350	3,600 J	48,700	39,200	39,400	39,900	32,700		59,000	42,400	20,800																						

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone ediate											Intermediate															
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2			
Sample Name	OU2MW-12I2	OU2MW-12D	OU2MW-12D	OU2MW-12D	DUP-01	OU2MW-12D	OU2MW-19I	OU2MW-19I	OU2MW-19I	OU2MW-19I	OU2MW-19I	OU2MW-19I2	DUP-02	OU2MW-19I2	OU2MW-19I2	OU2MW-19I2	OU2MW-27I	OU2MW-27I	OU2MW-27I	OU2MW-27I	OU2MW-27I2	OU2MW-27I2				
Start Depth	30	40	40	40	40	40	13	13	13	13	13	35	35	35	35	35	25	25	25	25	45	45				
End Depth	35	45	45	45	45	45	23	23	23	23	23	45	45	45	45	45	30	30	30	30	50	50				
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft				
Sample Date	4/5/2022	7/8/2021	10/13/2021	1/6/2022	1/6/2022	4/5/2022	7/21/2021	10/14/2021	1/11/2022	4/7/2022	7/21/2021	7/21/2021	7/21/2021	10/14/2021	1/11/2022	4/7/2022	9/29/2021	12/21/2021	2/14/2022	6/1/2022	9/29/2021	12/21/2021				
Parent Sample Code					OU2MW-12D								OU2MW-19I2													
Analyte	Units	CAS no.	NYS AWQS																							
BTEX	µg/L																									
Benzene		71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U			
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.77 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U			
Ethylbenzene		100-41-4	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U			
Total Xylene		1330-20-7	5	2 U	2 U	1 U	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 U	2 U	2 U	2 U	2 U			
Total BTEX		TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	ND	0.77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
PAH17	µg/L																									
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U							
Acenaphthylene		208-96-8	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	10 U	10 U	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	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	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	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	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 UJ	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 UJ	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	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	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 UJ	1 U	1 U	1 U	1 UJ	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	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U							
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U			
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U			
Naphthalene		91-20-3	10*	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 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U							
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Other																										
Sulfate	ug/L	14808-79-8	250,000	7,450	5,530	4,340	58,600	60,600	11,800 J																	

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Intermediate																				
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	
Sample Name	OU2MW-2712	OU2MW-2712	OU2MW-281	OU2MW-281	OU2MW-281	OU2MW-281	OU2MW-281I2	OU2MW-281I2	OU2MW-281I2	OU2MW-281I2	OU2MW-291	OU2MW-291	OU2MW-291	OU2MW-291	OU2MW-291I2									
Start Depth	45	45	28	28	28	28	40	40	40	40	18	18	18	18	30	30	30	30	30	30	30	30	30	30
End Depth	50	50	33	33	33	33	45	45	45	45	23	23	23	23	35	35	35	35	35	35	35	35	35	35
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date	2/16/2022	6/1/2022	9/15/2021	12/20/2021	2/21/2022	4/18/2022	9/17/2021	12/20/2021	2/21/2022	4/19/2022	9/13/2021	12/20/2021	2/21/2022	4/19/2022	9/13/2021	12/20/2021	2/22/2022	4/19/2022	9/13/2021	12/20/2021	2/22/2022	4/19/2022	9/13/2021	12/20/2021
Parent Sample Code																								
Analyte	Units	CAS no.	NYS AWQS																					
BTEX	µg/L																							
Benzene		71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5	2 U	1 U	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 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX		TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH17	µg/L																							
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	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)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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	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 U	2 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other																								
Sulfate	ug/L	14808-79-8	250,000																					

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Intermediate																			
Operable Unit	Sample Name	Start Depth	End Depth	Depth Unit	Sample Date	Parent Sample Code	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2						
							OU2MW-29D	OU2MW-29D	OU2MW-30I	OU2MW-30I	OU2MW-30I	OU2MW-30I	OU2MW-30I	DUP-03	OU2MW-30I2	OU2MW-30I2	OU2MW-30I2	OU2MW-30I2	OU2MW-30I2	OU2MW-30I3	OU2MW-30I3	OU2MW-30I3	OU2MW-30I3
Units	CAS no.	NYS AWQS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
BTEX																							
Benzene	71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	108-88-3	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	100-41-4	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene	1330-20-7	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	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH17																							
Acenaphthene	83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	208-96-8	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	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)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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	91-20-3	10*	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 U	2 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total PAH (17)	TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other																							
Sulfate	14808-79-8	250,000															9,820		11,800 J	9,560	11,600		

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Intermediate																		OU2		
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2
Sample Name	OU2MW-311	OU2MW-311	OU2MW-3112	OU2MW-3112	OU2MW-3112	OU2MW-3112	OU2MW-391	OU2MW-391	OU2MW-391	OU2MW-391	OU2MW-401	OU2MW-401	OU2MW-401	OU2MW-411	OU2MW-411	OU2MW-411	OU2MW-411	OU2MW-411	OU2MW-411	OU2MW-471	DUP-06	OU2MW-471	OU2MW-471	
Start Depth	18	18	30	30	30	30	25	25	25	18	18	18	18	18	18	18	18	18	18	20	20	20	20	
End Depth	23	23	35	35	35	35	30	30	30	23	23	23	23	23	23	23	23	23	23	25	25	25	25	
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date	3/4/2022	4/18/2022	9/28/2021	12/28/2021	3/4/2022	4/18/2022	8/10/2021	11/2/2021	1/10/2022	6/3/2022	9/27/2021	12/28/2021	4/18/2022	9/16/2021	12/30/2021	2/22/2022	4/20/2022	8/16/2021	8/16/2021	12/13/2021	1/18/2022			
Parent Sample Code																				OU2MW-471				
Analyte	Units	CAS no.	NYS AWQS																					
BTEX																								
Benzene	µg/L	71-43-2	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Toluene		108-88-3	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Ethylbenzene		100-41-4	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Total Xylene		1330-20-7	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	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
Total BTEX		TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
PAH17																								
Acenaphthene	µg/L	83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Acenaphthylene		208-96-8	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	10 U	10 U	10 U	10 U	10 U	10 U	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	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)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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Naphthalene		91-20-3	10*	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 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Other																								
Sulfate	ug/L	14808-79-8	250,000																					

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Intermediate					Deep														
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	
Sample Name	OU2MW-471	OU2MW-4712	OU2MW-4712	OU2MW-4712	OU2MW-4712	BBMW-01D	BBMW-01D	BBMW-01D	BBMW-01D	BBMW-25D	BBMW-25D	BBMW-25D	BBMW-25D	OU2MW-02I2	OU2MW-02I2	OU2MW-02I2	OU2MW-02I2	OU2MW-02D	OU2MW-02D	OU2MW-02D	OU2MW-02D		
Start Depth	20	40	40	40	40	68.5	68.5	68.5	68.5	62	62	62	62	50	50	50	50	65	65	65	65		
End Depth	25	45	45	45	45	78.5	78.5	78.5	78.5	72	72	72	72	55	55	55	55	70	70	70	70		
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft		
Sample Date	5/20/2022	8/16/2021	12/7/2021	1/18/2022	5/20/2022	7/12/2021	12/6/2021	2/9/2022	4/21/2022	9/7/2021	12/13/2021	1/10/2022	6/9/2022	9/7/2021	11/16/2021	1/10/2022	6/6/2022	9/7/2021	11/16/2021	1/10/2022	6/6/2022		
Parent Sample Code																							
Analyte	Units	CAS no.	NYS AWQS																				
BTEX	µg/L																						
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	1 U	0.96 J	0.47 J	0.45 J	1 U		1 U			1 U	1 U	1 U	1 U	1 U	1 U	
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	0.48 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	35	1 U	1 U	1 U	1 U	
Ethylbenzene		100-41-4	5	1 U	1 U	1 U	1 U	1 U	0.87 J	2.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Total Xylene		1330-20-7	5	2 U	1 U	2 U	1 U	2 U	3.9	2 U	2 U	0.85 J	2 U	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	1 U	
Total BTEX		TBTEX_ND0	NE	ND	ND	ND	ND	ND	6.21	2.57	0.45	0.85	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	
PAH17	µg/L																						
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Acenaphthylene		208-96-8	NE	10 U	10 U	10 U	10 U	10 U	1.3 J	1.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	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	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	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	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	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	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	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	1 U	1 U	1 U	1 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	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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 U	2 U	2 U	2 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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Naphthalene		91-20-3	10*	2 U	2 U	2 U	2 U	2 U	1.6 J	1.1 J	2 U	0.98 J	2 U	2 U	2 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	2.9	2.2	ND	0.98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Other																							
Sulfate	ug/L	14808-79-8	250,000																				
										10,600	13,400	13,100	12,800	113,000	47,300	58,200	42,600	6,000	5,150	8,440 J	4,290 J		

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone				Deep																			De	
Operable Unit	Sample Name	Start Depth	End Depth	Depth Unit	Sample Date	Parent Sample Code	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2
							OU2MW-19D	OU2MW-19D	OU2MW-19D	OU2MW-19D	OU2MW-27D	OU2MW-27D	OU2MW-27D	OU2MW-27D	OU2MW-30D	OU2MW-30D	OU2MW-30D	OU2MW-30D	OU2MW-30D	OU2MW-30D	OU2MW-30D2	OU2MW-30D2	OU2MW-30D2	OU2MW-30D2
Units	CAS no.	NYS AWQS	7/21/2021	10/14/2021	1/11/2022	4/7/2022	9/29/2021	12/21/2021	2/16/2022	6/1/2022	7/28/2021	9/29/2021	12/27/2021	1/17/2022	4/20/2022	7/29/2021	9/29/2021	12/27/2021	1/17/2022	4/20/2022	8/10/2021	11/2/2021	1/10/2022	
BTEX																								
Benzene	71-43-2	1	2.8	0.69 J	0.75 J	0.27 J	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 U	1 U	1 U	1 U	1 U	1 U
Toluene	108-88-3	5	1.1	1.2	0.42 J	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 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	100-41-4	5	0.36 J	0.32 J	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 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene	1330-20-7	5	12	11	4.7	3.2	2 U	1 U	2 U	1 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Total BTEX	TBTEX_ND0	NE	16.26	13.21	5.87	3.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH17																								
Acenaphthene	83-32-9	20*	1.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	208-96-8	NE	19	3.7 J	4 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	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)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	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	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	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 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	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	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 UJ	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 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
Fluoranthene	206-44-0	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	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	193-39-5	0.002*	2 U	2 UJ	2 UJ	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 U	2 U	2 U	2 U	2 U	2 UJ	2 U
2-Methylnaphthalene	91-57-6	NE	2.1 J	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U
Naphthalene	91-20-3	10*	38	1.5 J	1.2 J	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 U	2 U	2 U	2 U	2 U	2 U	2 U
Phenanthrene	85-01-8	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U
Total PAH (17)	TPAH17_ND0	NE	60.9	5.2	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other																								
Sulfate	14808-79-8	250,000	122,000	106,000	78,100	50,600					32,500		29,000 J	32,900	29,000	141,000		151,000	144,000	140,000				

Table 4-10. OU-2 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Aquifer Zone ep				Deep																		
Operable Unit	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	OU2	
Sample Name	OU2MW-3912	OU2MW-39D	DUP-05	OU2MW-39D	OU2MW-39D	OU2MW-39D	OU2MW-42D	OU2MW-42D	OU2MW-42D	OU2MW-42D	OU2MW-42D	OU2MW-43D	OU2MW-43D	OU2MW-43D	OU2MW-43D	OU2MW-43D	DUP-06	OU2MW-47D	OU2MW-47D	OU2MW-47D	OU2MW-47D	
Start Depth	45	70	70	70	70	70	60	60	60	60	60	65	65	65	65	65	65	60	60	60	60	
End Depth	50	75	75	75	75	75	65	65	65	65	65	70	70	70	70	70	70	65	65	65	65	
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date	6/3/2022	8/10/2021	8/10/2021	11/2/2021	1/10/2022	6/9/2022	8/10/2021	11/1/2021	1/10/2022	6/2/2022	7/12/2021	11/3/2021	3/2/2022	6/9/2022	6/9/2022	8/16/2021	12/13/2021	1/18/2022	5/20/2022			
Parent Sample Code			OU2MW-39D														OU2MW-43D					
Analyte	Units	CAS no.	NYS AWQS																			
BTEX	µg/L																					
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	1 U	1 U	1.6	0.88 J	1.2	0.78 J	4.4	3.3	7.8	4.4	4.2	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	1 U	6	4.8	4.2	2.2	2.3	0.54 J	1 U	0.54 J	0.52 J	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	1 U	1 U	1 U	1 U	1 U	1 U	14	10	10	3.9	1.7	0.39 J	1 U	1.1	1.1	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5	2 U	2 U	2 U	2 U	2 U	2 U	65	46	62	38	37	9.5	7.8 J	13	12	1 U	2 U	1 U	2 U
Total BTEX		TBTEX_ND0	NE	ND	ND	ND	2.7	ND	ND	86.6	61.68	77.4	44.88	45.4	13.73	15.6	19.04	17.82	ND	ND	ND	ND
PAH17	µg/L																					
Acenaphthene		83-32-9	20*	10 U	1.8 J	1.2 J	1.5 J	2.3 J	3.5 J	10 U	3 J	2.7 J	4.5 J	10 U	10 U	10 U	10 U					
Acenaphthylene		208-96-8	NE	10 U	14	7.3 J	19	19	29	10 U	18	18	13	10 U	10 U	10 U	10 U					
Anthracene		120-12-7	50*	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	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	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	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													
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	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	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	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Fluoranthene		206-44-0	50*	10 U	10 U	10 U	10 U	10 U	10 U													
Fluorene		86-73-7	50*	10 U	0.93 J	10 U	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 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	8.8 J	2.2 J	11	5.9 J	9.1 J	10 U	10 U	10 U	1.3 J	10 U	10 U	10 U	10 U					
Naphthalene		91-20-3	10*	2 U	2 U	2 U	2 U	2 U	2 U	65 J	2.6	140	94	120	2 U	4.4	47 J	14 J	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	50*	10 U	4.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U									
Pyrene		129-00-0	50*	10 U	10 U	10 U	10 U	10 U	10 U													
Total PAH (17)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	89.6	13.3	171.5	121.2	165.8	ND	25.4	67.7	33.73	ND	ND	ND	ND
Other																						
Sulfate	ug/L	14808-79-8	250,000							117,000	122,000	121,000	104,000		122,000	129,000	118,000	120,000	34,400	36,400	39,800	34,700

Table 4-11. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
 Quarterly Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	BTEX Groundwater Concentrations (µg/L)																										
		Sampling Date																										
		1992	1997			1998			1999				2000				2001				2002					2003		
Sep	Jun	Aug	Mar/Apr	Jun	Dec	Mar	Jun	Sep	Oct/Nov	Feb	May	Sep	Nov/Dec	Mar	Jun	Sep	Dec	Jan/Feb	Mar	Apr/May	Jun/Jul	Aug/Sep	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct		
BBMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	85	--	--	--	--	--	--	--	--	--	--	2	--	3	5	0	0	0		
BBMW-09I	30.0 - 40.0	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--		
BBMW-09D	62.0 - 72.0	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--		
BBMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-28I	10.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-29	2.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-33	7.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-10	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-11	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-28	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-29	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AS	8.91 - 23.91	0	--	--	--	--	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AI	35.24 - 50.24	0	--	--	--	--	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AD	59.8 - 74.8	0	--	--	--	--	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IO-10	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-16A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-16B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-18A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-18B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-20A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-20B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-01S	4.0 - 14.0	0	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-01D	35.0 - 45.0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-02S/S-R	2.0 - 12.0	161,000	98,200	90,100	143,200	103,200	103,400	132,000	125,100	295,000	72,100	73,000	73,200	137,000	123,100	--	--	--	--	159,200	149,000	166,500	180,000	134,000	149,600	99,400	124,800	263,000
MW-02I/I-R	22.5 - 23.5	--	--	238,900	1,435	4,201	650	965	144	0	65	199	33	--	--	--	--	--	--	--	--	--	--	--	--	--	63	
MW-03	4.94 - 14.94	--	35	--	1	--	--	--	--	178	--	--	--	--	--	--	--	--	--	24	24	--	3	28	23	85	--	
MW-04	5.1 - 15.1	--	1	--	0	--	--	--	--	0	--	--	--	--	--	--	--	--	--	2	--	28	9	0	69	--	--	
MW-08W	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11W	2.0 - 10.0	--	--	--	--	2,130	635	1,355	4,070	6,910	2,547	1,401	2,360	--	1,390	242	4,900	170	489	--	2,410	--	175	101	17	172	382	16
MW-12W	2.0 - 10.0	--	0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13W	2.0 - 10.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16W	2.0 - 10.0	--	55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16SR	2.0 - 10.0	--	--	--	79,600	46,190	20,640	1,830	28,980	64,900	3,627	71,900	34,900	55,990	15,370	--	--	3,350	122,600	75,500	59,800	24,550	22,700	45,500	4,424	10,400	27,260	42,700
MW-16I	14.0 - 19.0	--	--	--	24	10	55	1	45	0	0	6	12	0	--	--	--	--	--	--	--	2	--	--	--	--	--	0
MW-17W	2.0 - 10.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-24D	14.0 - 19.0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-29S	5.0 - 10.0	--	--	--	--	--	0	0	--	0	0	0	0	10	0	0	2	0	0	--	--	--	0	0	0	0	0	0
MW-29D	14.0 - 19.0	--	--	--	0	--	0	0	0	0	0	0	0	8	--	--	--	--	--	--	--	0	--	--	--	--	--	--

Table 4-11. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	BTEX Groundwater Concentrations (µg/L)																							
		Sampling Date																							
		2004				2005				2006				2007				2008				2009			
Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	March	Jun	Jul/Aug	Nov/Dec	March	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Aug-Sep	Oct-Dec		
BBMW-09S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-09I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-09D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BBMW-28S	2.0 - 12.0	--	--	--	--	0	0	0	0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	
BBMW-28I	10.0 - 20.0	--	--	--	--	0	0	0	0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	
BBMW-29	2.0 - 9.0	--	--	--	--	0	0	0	4,368	974	134	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-30S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-30I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-30D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-31S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-31I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-31D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-32S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-32I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-32D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	0	
BBMW-33	7.0 - 12.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BW-UST-10	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	
BW-UST-11	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	1	0	0	0	
BW-UST-28	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	
BW-UST-29	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	
GM-02AS	8.91 - 23.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GM-02AI	35.24 - 50.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GM-02AD	59.8 - 74.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IO-10	6.0 - 16.0	7,580	5,380	83	10	21,100	290	3,627	45	0	0	101	2,300	0	0	83	0	73	0	0	0	0	0	0	
IP-16A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-16B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-18A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-18B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-20A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
IP-20B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-01S	4.0 - 14.0	--	--	--	0	--	--	--	460	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MW-01D	35.0 - 45.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	--	--	--	0	
MW-02S/S-R	2.0 - 12.0	149,000	172,400	22,000	427	2,050	13	94	194	945	51	0	68	346	625	1,695	248	27	1	16	47	812	64	--	
MW-02I/I-R	22.5 - 23.5	14	--	--	--	62	--	--	--	0	--	--	--	0	0	0	0	0	0	3	0	0	0	--	
MW-03	4.94 - 14.94	35	51	52	0	22	28	24	27	0	24	28	14	0	0	20	18	5	5	9	11	6	14	16	
MW-04	5.1 - 15.1	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MW-08W	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-11W	2.0 - 10.0	0	0	0	1,449	30	6,580	1,400	2,071	190	61	0	933	42	110	62	97	95	77	35	8	0	0	27	
MW-12W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	
MW-13W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-16W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-16SR	2.0 - 10.0	354	1,320	41,800	317	66,800	65,500	34,600	45,820	42,100	15,000	17,900	18,600	12,250	6,050	15,870	20,770	36,270	11,710	5,840	14,280	3,275	4,192		
MW-16I	14.0 - 19.0	0	--	--	--	0	--	--	--	0	--	--	--	0	103	0	59	84	17	0	4	0	0	--	
MW-17W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-24D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	
MW-29S	5.0 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	0	0	0	
MW-29D	14.0 - 19.0	0	--	--	0	--	--	--	0	--	--	--	--	0	0	0	0	0	0	--	--	--	0	0	

Table 4-11. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	BTEX Groundwater Concentrations (µg/L)																							
		Sampling Date																							
		2004				2005				2006				2007				2008				2009			
	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	March	Jun	Jul/Aug	Nov/Dec	March	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Aug-Sep	Oct-Dec	
OU3MW-07I2	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07I3	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07I4	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-08S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-08I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-09S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-09I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-09I2	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-10S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-10I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-11S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-11I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-12S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-12I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-13S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-14S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-15S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-17I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-17I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-18I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-18I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-21I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-21I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-22I/IP-15A	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-22I2/IP-15B	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-23I/IP-17B	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-23I2/IP-17A	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-24I/IP-19A	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-24I2/IP-19B	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PDMW-01	5.0 - 20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70,920	0	0	0	0	0	0	0	0	
PDMW-02	5.0 - 20.0	115,900	117,600	82,000	83,000	90,000	60,300	37,300	100,000	19,500	85,100	67,500	98,000	62,700	79,700	68,020	84,400	70,570	65,260	51,400	73,810	59,210	46,350	--	
PDMW-03	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45,561	27,913	14,511	27,515	--	--	
SV-02	2.0 - 12.0	0	0	0	0	0	26,900	24,900	25,500	1,600	32	27,400	42	0	0	26,000	0	0	0	0	26	1	34,300	4	
SV-02I	22.0 - 27.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SV-02I2	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SV-03	2.0 - 12.0	33,200	11,600	615	4,400	936	5,509	249	2,702	570	257	831	116	65	207	185	341	105	477	60	56	29	10	5	
TMW-11	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TMW-11I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TMW-2I	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TMW-2I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TMW-3I	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TMW-3I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-11. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	BTEX Groundwater Concentrations (µg/L)																								Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum			
		Sampling Date																				Historic Minimum	Historic Maximum	Historic Average	Current Minimum						Current Maximum		
		2017				2018				2019				2020				2021														2022	
		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar											Apr-Jun	Historic Minimum
BBMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	85	3	--	--						
BBMW-09I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BBMW-09D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	15	2	--	--						
BBMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BBMW-28I	10.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	10	0	--	--						
BBMW-29	2.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4,368	128	--	--						
BBMW-30S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BBMW-30I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BBMW-30D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--						
BBMW-31S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--						
BBMW-31I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--						
BBMW-31D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--						
BBMW-32S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BBMW-32I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BBMW-32D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--						
BBMW-33	7.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BW-UST-10	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BW-UST-11	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--						
BW-UST-28	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
BW-UST-29	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
GM-02AS	8.91 - 23.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
GM-02AI	35.24 - 50.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
GM-02AD	59.8 - 74.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
IO-10	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	21,100	2,215	--	--						
IP-16A	14.0 - 15.0	0	0	0	0	--	0	--	--	--	50	--	0	0	0	0	0	0	--	--	14	0	664	39	7	7							
IP-16B	24.0 - 25.0	0	6	0	--	--	1.043	--	--	--	0	--	--	--	--	--	--	--	--	--	0	0	201	22	0	0							
IP-18A	14.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3,660	407	--	--							
IP-18B	24.0 - 25.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	167	19	--	--							
IP-20A	14.0 - 15.0	0	247	24	2	0	1272.7	0	0	0	59	--	0	0	0	0	0	0	--	--	--	0	4,846	350	0	0							
IP-20B	24.0 - 25.0	87	76	0	0	0	0.92	0	--	--	4	--	--	278	--	37	6	851	2	111	12	0	2,511	226	244	244							
MW-01S	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	460	17	--	--						
MW-01D	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
MW-02S/S-R	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	295,000	77,916	--	--						
MW-02I/I-R	22.5 - 23.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	238,900	10,281	--	--						
MW-03	4.94 - 14.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	178	22	--	--						
MW-04	5.1 - 15.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	69	3	--	--						
MW-08W	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
MW-11W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	6,910	724	--	--						
MW-12W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	488	16	--	--						
MW-13W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
MW-16W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55	55	55	--	--						
MW-16SR	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	317	122,600	30,530	--	--						
MW-16I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	103	17	--	--						
MW-17W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
MW-24D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--						
MW-29S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	10	0	--	--						
MW-29D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	8	0	--	--						

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																										
		Sampling Date																										
		1992 Sep	1997			1998			1999				2000				2001				2002				2003			
	Jun	Aug	Mar/Apr	Jun	Dec	Mar	Jun	Sep	Oct/Nov	Feb	May	Sep	Nov/Dec	Mar	Jun	Sep	Dec	Jan/Feb	Mar	Apr/May	Jun/Jul	Aug/Sep	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct		
BBMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	99	--	99	53	0	0	0		
BBMW-09I	30.0 - 40.0	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--		
BBMW-09D	62.0 - 72.0	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--		
BBMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-28I	10.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-29	2.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-33	7.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-10	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-11	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-28	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-29	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AS	8.91 - 23.91	0	--	--	--	--	--	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AI	35.24 - 50.24	0	--	--	--	--	--	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AD	59.8 - 74.8	0	--	--	--	--	--	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IO-10	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-16A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-16B	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-18A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-18B	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-20A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-20B	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-01S	4.0 -14.0	0	0	--	0	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-01D	35.0 - 45.0	0	--	--	1	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-02S/S-R	2.0 - 12.0	4,300	1,941	6,181	9,700	21,640	21,257	1,694	2,238	1,919	1,618	1,530	1,787	1,681	1,620	--	--	--	1,595	1,583	1,367	10,830	6,440	2,542	1,800	1,300	1,500	
MW-02I/I-R	22.5 - 23.5	--	--	6,478	99	12	11	10	1	0	0	53	--	--	--	--	--	--	--	--	--	--	--	--	--	0		
MW-03	4.94 - 14.94	--	40	--	0	--	--	--	--	77	--	--	--	--	--	--	--	--	103	85	--	89	50	0	45	--		
MW-04	5.1 - 15.1	--	4	--	99	--	--	--	--	0	--	--	--	--	--	--	--	--	--	90	--	99	--	0	53	--		
MW-08W	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-11W	2.0 - 10.0	--	--	--	--	861	222	142	298	469	62	290	389	--	178	265	363	159	156	--	246	--	225	145	22	21	35	11
MW-12W	2.0 - 10.0	--	0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-13W	2.0 - 10.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-16W	2.0 - 10.0	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-16SR	2.0 - 10.0	--	--	--	15,910	10,500	2,468	696	2,447	2,307	450	1,910	1,173	3,096	1,036	--	--	77	38,045	6,557	3,414	1,558	2,430	6,140	214	72	590	649
MW-16I	14.0 - 19.0	--	--	--	18	0	0	3	0	0	7	0	0	0	--	--	--	--	--	--	--	0	--	--	--	--	0	
MW-17W	2.0 - 10.0	--	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-24D	14.0 - 19.0	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-29S	5.0 - 10.0	--	--	--	--	0	0	0	--	0	516	0	0	2	0	0	0	0	0	--	--	0	0	0	0	0	0	0
MW-29D	14.0 - 19.0	--	--	--	0	--	0	0	0	0	0	0	0	2	--	--	--	--	--	--	--	0	--	--	--	--	--	--

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																											
		Sampling Date																											
		2004				2005				2006				2007				2008				2009				2010			
Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	March	Jun	Jul/Aug	Nov/Dec	March	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Aug-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-09S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BBMW-09I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	150	--	0	--	0	--	--	--	0	--	--	--	0	--	--	
BBMW-09D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	--	0	--	--	0	--	--	--	0	--	--		
BBMW-28S	2.0 - 12.0	--	--	--	--	0	0	68	0	--	--	--	--	0	0	0	0	0	0	3	0	0	0	0	0	0	0		
BBMW-28I	10.0 - 20.0	--	--	--	--	0	0	0	0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BBMW-29	2.0 - 9.0	--	--	--	--	0	0	0	170	120	37	0	0	0	252	0	0	0	0	0	5	0	0	0	0	0	0		
BBMW-30S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	--	0	--	--	0	0	0		
BBMW-30I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	0	4	0	0	0	--	--	--	0	--	--	3	0	0		
BBMW-30D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	--	0	--	--	0	0	0		
BBMW-31S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	--	0	--	--	0	0	0		
BBMW-31I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	0	4	0	0	0	--	--	--	0	--	--	0	2	0		
BBMW-31D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	--	0	--	--	0	0	0		
BBMW-32S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	1	1	0	0	--	--	--	0	--	--	3	0	0		
BBMW-32I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	--	0	--	--	0	0	0		
BBMW-32D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	--	--	--	0	--	--	0	0	0		
BBMW-33	7.0 - 12.0	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BW-UST-10	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	69	0	0	0	0	0	0	0	0	0	0		
BW-UST-11	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	0	0	0	68	0	2	1	0	0	0	0	0	0	0	0		
BW-UST-28	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BW-UST-29	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
GM-02AS	8.91 - 23.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AI	35.24 - 50.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AD	59.8 - 74.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IO-10	6.0 - 16.0	786	625	0	0	937	91	350	0	0	0	0	100	0	0	18	0	4	0	0	0	0	0	0	0	0	102		
IP-16A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-16B	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-18A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-18B	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-20A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IP-20B	24.0 -25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-01S	4.0 -14.0	--	--	--	0	--	--	--	0	--	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		
MW-01D	35.0 - 45.0	--	--	--	--	--	--	--	--	--	0	263	0	0	0	0	0	0	0	--	--	--	0	0	0	0	--		
MW-02S/S-R	2.0 - 12.0	2,400	2,060	254	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--		
MW-02I/I-R	22.5 - 23.5	0	--	--	--	0	--	--	--	0	--	--	--	0	0	0	0	0	0	0	0	0	--	--	--	--	--		
MW-03	4.94 - 14.94	26	19	43	19	21	34	40	57	0	28	35	34	35	11	56	0	12	0	0	0	28	0	0	82	16	0		
MW-04	5.1 - 15.1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		
MW-08W	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-11W	2.0 - 10.0	0	1729	0	110	0	10	0	27	15	18	0	19	0	0	5	1	2	0	0	0	0	0	0	1	0			
MW-12W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	3	0	0	0	0	0	0	0		
MW-13W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-16W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-16SR	2.0 - 10.0	0	0	1,022	2,068	3,500	3,900	3,611	1,280	2,183	1,870	1,056	676	842	232	280	579	922	355	552	104	28	143	--	--	--			
MW-16I	14.0 - 19.0	0	--	--	--	57	--	--	--	0	--	--	--	0	44	0	0	0	0	0	0	0	0	--	--	--			
MW-17W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-24D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	0	0	0	0	0	--	--	--	--		
MW-29S	5.0 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	0	0	0	0	0	--		
MW-29D	14.0 - 19.0	0	--	--	0	--	--	--	0	--	--	--	--	0	0	0	0	0	--	--	--	0	0	0	0	0	--		

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																													
		Sampling Date																													
		2004				2005				2006				2007				2008				2009				2010					
Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	March	Jun	Jul/Aug	Nov/Dec	March	May-Jul	Aug-Oct	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Aug-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec				
OU3MW-07I2	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0
OU3MW-07I3	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	35.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-08S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	297	--
OU3MW-08I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--
OU3MW-09S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	345	--
OU3MW-09I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,453	--
OU3MW-09I2	35.0-40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-10S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	417	--
OU3MW-10I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--
OU3MW-11S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--
OU3MW-11I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--
OU3MW-12S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--
OU3MW-12I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--
OU3MW-13S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-14S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-15S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-16S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-17I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-17I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-18I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-18I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-21I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-21I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-22I/IP-15A	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-22I2/IP-15B	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-23I/IP-17B	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-23I2/IP-17A	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-24I/IP-19A	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-24I2/IP-19B	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PDMW-01	5.0 - 20.0	0	0	0	71	0	0	0	0	0	0	0	0	0	0	0	0	1,464	0	0	2	0	0	0	--	0	0	0	0	0	0
PDMW-02	5.0 - 20.0	2,300	2,463	1,918	2,316	2,616	2,312	2,716	2,416	2,013	2,420	2,119	3,022	2,716	2,520	1,241	1,976	3,025	2,226	1,934	1,950	2,797	3,206	--	--	--	--	--	--	--	--
PDMW-03	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,721	1,619	2,100	2,108	--	--	--	--	--	--	--	--
SV-02	2.0 - 12.0	0	0	0	0	0	39	190	324	0	0	35	0	0	0	133	0	0	0	3	0	0	0	669	0	0	0	0	770	0	0
SV-02I	22.0-27.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SV-02I2	35.0-40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SV-03	2.0 - 12.0	536	272	150	130	80	33	0	0	96	57	0	0	17	0	31	72	17	0	0	0	0	0	1	0	0	0	0	0	1	0
TMW-11	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-112	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-2I	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-2I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-3I	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-3I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																											
		Sampling Date																											
		2011				2012				2013				2014				2015				2016				2017			
Mar-Apr	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
BBMW-09S	5.0 - 15.0	1	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-09I	30.0 - 40.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-09D	62.0 - 72.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-28S	2.0 - 12.0	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BBMW-28I	10.0 - 20.0	0	7	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BBMW-29	2.0 - 9.0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BBMW-30S	2.0 - 10.0	0	0	0	0	4	0	0	--	0	0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30I	14.0 - 19.0	0	0	0	0	0	1	5	--	0	0	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-30D	30.0 - 35.0	0	0	0	0	0	0	2	--	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-31S	2.0 - 10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	--	--	--	--	0	--	--	--	--		
BBMW-31I	14.0 - 19.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0	--	--	--	--		
BBMW-31D	30.0 - 35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	--	--	--	--	0	--	--	--	--		
BBMW-32S	2.0 - 10.0	0	0	0	0	0	0	0	--	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32I	14.0 - 19.0	0	0	0	0	0	0	0	--	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-32D	30.0 - 35.0	0	0	0	0	0	0	0	--	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--		
BBMW-33	7.0 - 12.0	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0	--	--	--	--	--		
BW-UST-10	5.0 - 10.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-11	5.0 - 10.0	0	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-28	5.0 - 10.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BW-UST-29	5.0 - 10.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AS	8.91 - 23.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AI	35.24 - 50.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GM-02AD	59.8 - 74.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
IO-10	6.0 - 16.0	992	1,285	682	689	704	876	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
IP-16A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	0	0	0	4	0	0	0		
IP-16B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	43	2	0	16	0	0	0	5	0		
IP-18A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	--		
IP-18B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	12	0	0	0	--		
IP-20A	14.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	0	0	284	5	0	0	2	0		
IP-20B	24.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	95	0	220	27	0	0	26	41	0		
MW-01S	4.0 - 14.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-01D	35.0 - 45.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-02S/S-R	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-02I/I-R	22.5 - 23.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-03	4.94 - 14.94	3	--	--	--	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-04	5.1 - 15.1	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-08W	5.0 - 10.0	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-11W	2.0 - 10.0	0	0	0	1	2	8	37	38	3	0	--	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
MW-12W	2.0 - 10.0	0	0	0	0	0	47	0	0	7	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MW-13W	2.0 - 10.0	--	0	0	--	0	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	0	--	--	--	--		
MW-16W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-16SR	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-16I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-17W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-24D	14.0 - 19.0	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-29S	5.0 - 10.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-29D	14.0 - 19.0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																											
		Sampling Date																											
		2011				2012				2013				2014				2015				2016				2017			
Mar-Apr	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
OU3MW-07I2	20.0 - 25.0	91	654	695	257	1,020	517	6	5	1	1	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU3MW-07I3	25.0 - 30.0	--	--	--	--	1,800	0	3	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	
OU3MW-07I4	35.0 - 40.0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	0	0	0	0	0	2	
OU3MW-08S	2.0-12.0	449	0	855	0	376	360	206	153	397	28	285	468	383	247	217	155	227	0	194	195	61	71	323	123	121	82	237	47
OU3MW-08I	25.0-30.0	0	0	0	0	0	2	0	--	--	0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-09S	2.0-12.0	0	0	61	3	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--
OU3MW-09I	25.0-30.0	1,528	1,207	1,765	1,973	1,263	331	259	525	267	283	184	121	123	55	101	154	308	60	121	184	57	256	135	150	132	214	143	242
OU3MW-09I2	35.0-40.0	--	--	0	2	3	2	4	2	2	9	2	2	1	1	0	1	2	1	0	--	0	--	--	--	--	0	--	--
OU3MW-10S	2.0-12.0	240	225	123	0	42	51	16	3	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--	--	0	--	--	
OU3MW-10I	25.0-30.0	0	0	0	30	116	28	85	79	0	120	121	105	97	132	44	48	102	62	29	12	56	--	14	3	9	22	4	4
OU3MW-11S	2.0-12.0	0	0	0	0	2	0	0	--	--	0	--	--	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-11I	25.0-30.0	0	0	0	0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-12S	2.0-12.0	0	0	0	0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-12I	25.0-30.0	0	0	0	0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-13S	2.0-12.0	--	--	117	55	1,244	13	268	720	600	662	262	0	0	89	0	0	77	5	0	0	0	0	0	22	0	0	0	3
OU3MW-14S	2.0-12.0	--	--	785	579	641	660	612	661	413	380	778	3	2	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-15S	2.0-12.0	--	--	377	113	19	0	277	260	4	12	282	3	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-16S	2.0-12.0	--	--	9	110	140	220	191	120	263	161	0	8	61	94	334	486	204	45	8	211	142	261	122	55	72	121	0	34
OU3MW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-17I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-17I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-18I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	52	2	1	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-18I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	3	0	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	640	1,004	308	--	716	27	48	73	59	29	20	33	11	0	7	7	1	0	
OU3MW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	17	61	0	--	0	4	17	2	0	0	0	0	0	0	0	0	0	0	0
OU3MW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	0	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU3MW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	23	11	1	2	4	11	0	0	6	0	0	0	1	0	0	0	1	0	0
OU3MW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	310	421	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OU3MW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	0	6	0	0	102	2	0	0	0	0	0	0	0	0	0	0	0	4	0
OU3MW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-21I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-21I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	0	14	0	0	0	0	0	0	0	--	--	--	0	--	--	--	--	--	--
OU3MW-22I/IP-15A	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	379	22	0	0	0	0	0	0	0	--	--
OU3MW-22I/IP-15B	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	0	0	0	0	0	0	0	0	--	--
OU3MW-23I/IP-17B	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	388	42	179	19	36	63	4	29	4	5	28
OU3MW-23I2/IP-17A	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	132	21	12	0	--	0	0	0	0	2	0
OU3MW-24I/IP-19A	10.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	165	1	1	3	2	1	0	0	0	0	3
OU3MW-24I2/IP-19B	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	300	255	0	16	0	18	0	0	0	0	0
PDMW-01	5.0 - 20.0	0	4	0	0	0	0	0	--	--	0	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PDMW-02	5.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PDMW-03	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SV-02	2.0 - 12.0	0	0	6	1	1	0	9	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--
SV-02I	22.0-27.0	--	--	1,075	133	104	618	626	1,688	386	68	51	3	0	0	109	23	0	6	1	0	0	0	0	0	0	--	0	
SV-02I2	35.0-40.0	--	--	0	0	0	5	5	0	0	0	0	0	0	0	0	0	6	--	--	--	0	--	--	--	0	--	--	--
SV-03	2.0 - 12.0	0	0	0	6	11	17	39	8	6	1	6	5	0	0	1	3	0	0	--	--	--	0	--	--	--	--	--	--
TMW-11	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-112	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-21	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-212	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-31	12.0 - 17.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TMW-312	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020				2021				2022						
		Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun						
BBMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	99	7	--	--		
BBMW-09I	30.0 - 40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	150	17	--	--		
BBMW-09D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
BBMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	68	2	--	--		
BBMW-28I	10.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	7	0	--	--		
BBMW-29	2.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	252	14	--	--		
BBMW-30S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4	0	--	--		
BBMW-30I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5	1	--	--		
BBMW-30D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--		
BBMW-31S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
BBMW-31I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	12	1	--	--		
BBMW-31D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--		
BBMW-32S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--		
BBMW-32I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
BBMW-32D	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
BBMW-33	7.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
BW-UST-10	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	69	4	--	--		
BW-UST-11	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	68	5	--	--		
BW-UST-28	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
BW-UST-29	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--		
GM-02AS	8.91 - 23.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
GM-02AI	35.24 - 50.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
GM-02AD	59.8 - 74.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
IO-10	6.0 - 16.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,285	175	--	--		
IP-16A	14.0 - 15.0	--	0	--	--	--	0	--	0	0	0	0	0	0	0	0	1	0	4	0	1	1		
IP-16B	24.0 - 25.0	--	6.3	--	--	--	0	--	0	--	--	--	--	--	--	--	--	0	43	6	--	--		
IP-18A	14.0 - 15.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
IP-18B	24.0 - 25.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	12	1	--	--		
IP-20A	14.0 - 15.0	0	64	0	0	0	0	--	0	0	0	0	0	0	0	0	0	0	284	15	0	0		
IP-20B	24.0 - 25.0	0	2.6	0	--	--	0	--	--	93	--	1	0	130	0	6	0	0	220	31	34	34		
MW-01S	4.0 - 14.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
MW-01D	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	263	16	--	--		
MW-02S/S-R	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	21,640	2,517	--	--		
MW-02I/I-R	22.5 - 23.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	6,478	278	--	--		
MW-03	4.94 - 14.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	103	30	--	--		
MW-04	5.1 - 15.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	99	9	--	--		
MW-08W	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
MW-11W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	861	75	--	--		
MW-12W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	52	3	--	--		
MW-13W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
MW-16W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	3	3	--	--		
MW-16SR	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	38,045	2,885	--	--		
MW-16I	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	57	5	--	--		
MW-17W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	11	11	--	--		
MW-24D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
MW-26D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	1	--	--		
MW-29S	5.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	516	12	--	--		
MW-29D	14.0 - 19.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--		

Table 4-12. OU-3 Summary of Historical Total BTEX Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020				2021				2022						
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								
MW-30W/W-R	2.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,300	52	--	--		
MW-32W/W-R	2.0 - 9.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,435	117	--	--		
MW-34S	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,604	217	--	--		
MW-34I	18.5 - 19.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	869	101	--	--		
MW-34D	27.5 - 28.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	306	23	--	--		
MW-34DD	27.5 - 28.5	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	12	1	--	--		
MW-37W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--		
MW-39W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
MW-45W	2.0 - 10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,676	119	--	--		
MW-46W/W-R	2.0 - 10.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4,156	312	--	--		
MW-64	19.0 - 24.0	8	0	11	172	0	0	0	147	0	7	103	0	0	12	0	4	0	2,199	177	4	4		
MW-65	11.0 - 16.0	--	11	--	0	0	0	4	0	2	0	0	0	3	--	0	12	0	1,415	58	4	4		
MW-66S	1.5 - 11.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
MW-66D	24.0 - 29.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--		
MW-67S	2.5 - 12.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
MW-67D	24 - 29 ft	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
MW-68S	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
MW-68D	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--		
MW-70/70S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,720	94	--	--		
MW-73	2.0 - 12.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	0	1,800	442	--	--		
MW-73I	22.0-27.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	698	77	--	--		
MW-75	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2,890	375	--	--		
MW-75I	22.0-27.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3,289	374	--	--		
MW-76	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	142	15	--	--		
MW-78	5.0 - 20.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	0	1,439	201	--	--		
MW-79	5.0 - 20.0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	--	0	6,015	386	--	--		
MW-80	5.0 - 20.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	0	2,500	594	--	--		
MW-81	5.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2,700	576	--	--		
MW-82	5.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3,090	356	--	--		
MW-83	5.0 - 20.0	--	--	--	--	0	0	0	0	0	0	0	0	0	0	1	0	0	249	30	0	0		
MWBS-01S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	64	22	--	--		
MWBS-02S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	274	40	--	--		
MWBS-02I	14.5 - 15.5	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	696	53	--	--		
MWBS-02D	24.5 - 25.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	254	20	--	--		
MW-UST1	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	979	289	--	--		
MW-UST2	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	621	281	--	--		
MW-UST3	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	134	21	--	--		
OU3MW-01S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
OU3MW-02S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
OU3MW-02I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
OU3MW-03S	1.0 - 11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	160	21	--	--		
OU3MW-03I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	611	66	--	--		
OU3MW-04S	1.0 - 11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	69	6	--	--		
OU3MW-04I	16.0 - 21.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	44	5	--	--		
OU3MW-04D	26.0 - 31.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	804	95	--	--		
OU3MW-04D2	31.0 - 36.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	195	22	--	--		
OU3MW-04D3	41.0 - 46.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--		
OU3MW-05S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	--	--		
OU3MW-05I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	156	9	--	--		
OU3MW-06	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	10	1	--	--		
OU3MW-07S	3.0 - 13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	527	12	0	0		
OU3MW-07I	15.0 - 20.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	5	0	0		

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National Grid Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY**

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentrations (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020				2021				2022						
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								
OU3MW-07I2	20.0 - 25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,020	68	0	0	
OU3MW-07I3	25.0 - 30.0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1,800	44	0	0	
OU3MW-07I4	35.0 - 40.0	2	0	0	0	0	2	0	0	0	9	0	10	0	0	2	0	2	10	1	0	0		
OU3MW-08S	2.0-12.0	10	0	0	10	144	0	0	115	7	499	25	10	52	222	81	173	155	855	175	158	158		
OU3MW-08I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	--	--	
OU3MW-09S	2.0-12.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	345	15	--	--	
OU3MW-09I	25.0-30.0	204	84.3	224	82	109	88	101	174	71	15	14	0	1	3	4	3	4	1,973	321	4	4		
OU3MW-09I2	35.0-40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	9	2	--	--	
OU3MW-10S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	417	70	--	--	
OU3MW-10I	25.0-30.0	88	14	0	24	73	2	0	2	30	0	0	17	0	2	2	1	4	132	35	2	2		
OU3MW-11S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4	1	--	--	
OU3MW-11I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-12S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-12I	25.0-30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-13S	2.0-12.0	0	0	0	0	0	0	--	--	--	0	--	--	0	0	--	0	0	1,244	112	0	0		
OU3MW-14S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	785	324	--	--	
OU3MW-15S	2.0-12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	377	79	--	--	
OU3MW-16S	2.0-12.0	11	34	0	98	18	64	35	66	7	51	0	6	0	0	1	7	3	486	90	3	3		
OU3MW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-17I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-17I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-18I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	52	6	--	--	
OU3MW-18I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--	
OU3MW-19S	2.0 - 12.0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1,004	88	0	0		
OU3MW-19I	20.0 - 25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	3	0	0		
OU3MW-19I2	30.0 - 35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OU3MW-20S	2.0 - 12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	2	0	0		
OU3MW-20I	20.0 - 25.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421	21	0	0		
OU3MW-20I2	30.0 - 35.0	0	0	468	0	0	0	0	167	9	0	0	0	68	0	0	95	0	468	26	24	24		
OU3MW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-21I	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	
OU3MW-21I2	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	14	2	--	--	
OU3MW-22I/IP-15A	10.0 - 15.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	0	379	36	--	--	
OU3MW-22I/IP-15B	25.0 - 30.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	--	--	
OU3MW-23I/IP-17B	10.0 - 15.0	0	0	2	1	0	0	0	0	0	--	--	0	1	--	0	0	0	388	32	0	0		
OU3MW-23I2/IP-17A	25.0 - 30.0	0	0	0	0	--	0	--	--	--	0	--	--	--	--	--	--	0	132	10	--	--		
OU3MW-24I/IP-19A	10.0 - 15.0	0	0	0	0	0	0	--	--	--	0	--	--	0	0	--	--	0	165	9	0	0		
OU3MW-24I2/IP-19B	25.0 - 30.0	2	0	0	0	0	0	0	66	0	0	0	0	0	0	0	0	0	300	23	0	0		
PDMW-01	5.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	13,000	491	--	--	
PDMW-02	5.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,130	5,848	2,421	--	--	
PDMW-03	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,619	2,108	1,887	--	--	
SV-02	2.0 - 12.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	770	68	--	--	
SV-02I	22.0-27.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,688	196	--	--	
SV-02I2	35.0-40.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	6	1	--	--	
SV-03	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	548	67	--	--	
TMW-11	12.0 - 17.0	--	--	--	--	--	--	34	0	0	0	0	0	0	0	0	13	0	34	4	3	3		
TMW-11I2	25.0 - 30.0	--	--	--	--	--	--	318	11	0	0	0	0	5	2	0	9	37	0	318	35	12	12	
TMW-21	12.0 - 17.0	--	--	--	--	--	--	0	0	0	0	0	--	0	0	0	--	0	0	0	0	0	0	
TMW-21I2	25.0 - 30.0	--	--	--	--	--	--	157	64	25	--	101	10	17	55	1	0	38	0	157	47	24	24	
TMW-31	12.0 - 17.0	--	--	--	--	--	--	0	18	0	--	0	77	14	5	0	9	10	0	77	13	6	6	
TMW-31I2	25.0 - 30.0	--	--	--	--	--	--	56	0	21	0	0	--	0	0	0	1	0	0	56	8	0	0	

Notes for groundwater tables are compiled at the end of the Tables in this section.

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient Area (Brightwaters Yard)												
Aquifer Zone				Shallow								Intermediate				
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3
Sample Name				OU3MW-08S	OU3MW-08S	OU3MW-08S	OU3MW-08S	OU3MW-16S	OU3MW-16S	OU3MW-16S	OU3MW-16S	OU3MW-16S	OU3MW-09I	OU3MW-09I	OU3MW-09I	OU3MW-10I
Start Depth				2	2	2	2	2	2	2	2	25	25	25	25	25
End Depth				12	12	12	12	12	12	12	12	30	30	30	30	30
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				8/5/2021	10/4/2021	2/3/2022	6/2/2022	8/5/2021	10/4/2021	2/3/2022	6/2/2022	8/5/2021	10/5/2021	2/8/2022	6/14/2022	8/5/2021
Parent Sample Code																
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	1	290	160	150	120	0.38 J	0.47 J	4.1	0.97 J	0.85 J	0.47 J	2.1	1.7	1 U
Toluene		108-88-3	5	160	31	78	38	1 U	1 U	1.3	1 U	10	9.3	74	71	1.1
Ethylbenzene		100-41-4	5	1,300	640	540	420	1 U	0.43 J	23	11	3.9	2.5	21	19	10
Total Xylene		1330-20-7	5	990	390	480	260	2 U	0.92 J	8.6	4.1	12	12	71	77	11
Total BTEX (ND=0)		TBTEX_ND0	NE	2,740	1,221	1,248	838	0.38	1.82	37	16.07	26.75	24.27	168.1	168.7	22.1
PAH17	µg/L															
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	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	1 U
Fluoranthene		206-44-0	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	10 U
Fluorene		86-73-7	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	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 U
2-Methylnaphthalene		91-57-6	NE	2 J	1.4 J	2.8 J	4.7 J	10 U	10 U	10 U	10 U	0.63 J	0.85 J	0.57 J	10 U	10 U
Naphthalene		91-20-3	10*	220	80	170	150	2 U	1.3 J	6.9	2.9	2.6	3.3	2.9	4.1	1.8 J
Phenanthrene		85-01-8	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	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	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	222	81.4	172.8	154.7	ND	1.3	6.9	2.9	3.23	4.15	3.47	4.1	1.8

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Upgradient Area (Brightwaters Yard)				Sheeting Cell Areas (Southern Brightwaters Yard and LIRR ROW)									
Aquifer Zone				Intermediate													
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3		
Sample Name				OU3MW-10I	OU3MW-10I	OU3MW-10I	IP-16A	IP-16A	IP-20A	IP-20A	IP-20B	IP-20B	IP-20B	IP-20B	OU3MW-23I/IP-17B	OU3MW-23I/IP-17B	
Start Depth				25	25	25	14	14	14	14	24	24	24	24	10	10	
End Depth				30	30	30	15	15	15	15	25	25	25	25	15	15	
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date				10/4/2021	2/8/2022	6/14/2022	8/10/2021	5/10/2022	5/10/2022	8/10/2021	8/5/2021	11/1/2021	2/7/2022	5/10/2022	8/10/2021	2/7/2022	
Parent Sample Code																	
Analyte	Units	CAS no.	NYS AWQS														
BTEX	µg/L																
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4	1 U	1 U	1 U	16	1 U
Toluene		108-88-3	5	1 U	1 U	2.6	1 U	0.75 J	1 U	1 U	69	1 U	2.6	3.7	8.8	1 U	
Ethylbenzene		100-41-4	5	4.1	5.3	11	1 U	7.2	1 U	1 U	300	0.39 J	39	5	2 J	0.32 J	
Total Xylene		1330-20-7	5	4.8	4.2	6.3	2 U	6	2 U	2 U	480	1.6 J	69	3.4	17	2 U	
Total BTEX (ND=0)		TBTEX_ND0	NE	8.9	9.5	19.9	ND	13.95	ND	ND	851.4	1.99	110.6	12.1	43.8	0.32	
PAH17	µg/L																
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4.1 J	10 U	3.6 J	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.2 J	10 U	0.97 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 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	15	10 U	1.1 J	10 U	10 U	10 U
Naphthalene		91-20-3	10*	1.9 J	0.8 J	4	2 U	1.3 J	2 U	2 U	110	2 U	0.78 J	2 U	0.55 J	2 U	2 U
Phenanthrene		85-01-8	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	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	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	1.9	0.8	4	ND	1.3	ND	ND	130.3	ND	6.45	ND	0.55	ND	

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Sheeting Cell Areas (Southern Brightwaters Yard and LIRR ROW)												
Aquifer Zone				Intermediate												
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	
Sample Name				OU3MW-23I/IP-17B	DUP-04	OU3MW-24I/IP-19A	OU3MW-24I2/IP-19B	OU3MW-24I2/IP-19C	OU3MW-24I2/IP-19D	OU3MW-24I2/IP-19E	TMW-11	TMW-11	TMW-11	TMW-11	TMW-112	TMW-112
Start Depth				10	10	10	25	25	25	25	12		12	12	25	25
End Depth				15	15	15	30	30	30	30	17		17	17	30	30
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft		ft	ft	ft	ft
Sample Date				5/10/2022	5/10/2022	8/10/2021	8/5/2021	11/1/2021	2/7/2022	5/10/2022	8/5/2021	10/5/2021	2/8/2022	6/1/2022	8/5/2021	10/5/2021
Parent Sample Code				OU3MW-23I/IP-17B												
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.86 J	2.4	0.22 J	1.5	0.68 J	1 U
Toluene		108-88-3	5	1 U	1 U	1 U	0.39 J	0.46 J	0.68 J	1 U	0.79 J	2.3	1 U	18	1 U	1 U
Ethylbenzene		100-41-4	5	1 U	1 U	1 U	17	3.4	3.8	1 U	32	58	1.7	82	0.56 J	1 U
Total Xylene		1330-20-7	5	2 U	2 U	2.3	11	6.1	2.5	2 U	31	85	1 U	120	4.6	0.94 J
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND	2.3	28.39	9.96	6.98	ND	64.65	147.7	1.92	221.5	5.84	0.94
PAH17	µg/L															
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.3 J	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	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	1 U
Fluoranthene		206-44-0	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	10 U
Fluorene		86-73-7	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	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 U
2-Methylnaphthalene		91-57-6	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	10 U
Naphthalene		91-20-3	10*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	13	2 U	2 U
Phenanthrene		85-01-8	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	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	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	2.3	ND

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
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 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Sheeting Cell Areas (Southern Brightwaters Yard and LIRR ROW)												
Aquifer Zone				Intermediate												
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	
Sample Name				TMW-112	TMW-112	TMW-21	TMW-21	TMW-21	TMW-212	TMW-212	TMW-212	DUP-08	TMW-212	TMW-31	TMW-31	TMW-31
Start Depth				25	25	12	12	12	25	25	25	25	25	12	12	12
End Depth				30	30	17	17	17	30	30	30	30	30	17	17	17
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				2/8/2022	6/1/2022	6/1/2022	8/9/2021	10/5/2021	8/9/2021	10/5/2021	3/3/2022	3/3/2022	6/1/2022	8/6/2021	10/5/2021	2/8/2022
Parent Sample Code											TMW-212					
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	1	1.1	2.9	1 U	1 U	0.48 J	2.8	0.91 J	1.7	1.7	1.5	1 U	0.42 J	1 U
Toluene		108-88-3	5	12	250	1 U	1 U	0.53 J	0.54 J	0.7 J	2.2	2.1	20	1.4	1	0.66 J
Ethylbenzene		100-41-4	5	16	360	0.33 J	0.55 J	1.8	33	13	19	18	110	22	1	7.2
Total Xylene		1330-20-7	5	43	590	2 U	2 U	1 U	34	4.6	10 J	8.7 J	120	21	0.7 J	5.6
Total BTEX (ND=0)		TBTEX_ND0	NE	72.1	1,202.90	0.33	0.55	2.81	70.34	19.21	32.9	30.5	251.5	44.4	3.12	13.46
PAH17	µg/L															
Acenaphthene		83-32-9	20*	3.4 J	6.6 J	10 U	10 U	10 U	3.1 J	1.4 J	10 U	10 U	1.7 J	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	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	1 U
Fluoranthene		206-44-0	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	10 U
Fluorene		86-73-7	50*	10 U	10 U	10 U	10 U	10 U	1.5 J	10 U	10 U	10 U	10 U	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 UJ	2 UJ	2 U	2 U	2 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	10 U	10 U	1.2 J	10 U	10 UJ	10 U	2.2 J	10 U	10 U	10 U
Naphthalene		91-20-3	10*	5.3	30	2 U	2 U	2 U	49	2 U	2 UJ	2 U	34	5	2 U	8.9
Phenanthrene		85-01-8	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	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	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	8.7	36.6	ND	ND	ND	54.8	1.4	ND	ND	37.9	5	ND	8.9

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Sheeting Cell Areas (Southern Brightwaters Yard and LIRR ROW)						Downgradient of the LIRR ROW						
Aquifer Zone				Intermediate						Shallow						
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	
Sample Name				TMW-3I	TMW-3I2	DUP-04	TMW-3I2	TMW-3I2	TMW-3I2	MW-83	MW-83	MW-83	OU3MW-07S	OU3MW-07S	OU3MW-07S	OU3MW-07S
Start Depth				12	25	25	25	25	25	5	5	5	3	3	3	3
End Depth				17	30	30	30	30	30	20	20	20	13	13	13	13
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				6/1/2022	8/6/2021	8/6/2021	10/5/2021	2/8/2022	6/1/2022	12/21/2021	1/26/2022	6/30/2022	7/13/2021	10/6/2021	2/2/2022	4/7/2022
Parent Sample Code						TMW-3I2										
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	1	0.5 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	0.67 J	1 U	1 U	0.91 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	42	0.34 J	0.36 J	5.9	1.8	0.4 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5	20	2 U	2 U	3.7	1.1	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	63.17	0.34	0.36	10.51	2.9	0.4	ND	ND	ND	ND	ND	ND	ND
PAH17	µg/L															
Acenaphthene		83-32-9	20*	1.5 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	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	1 U
Fluoranthene		206-44-0	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	10 U
Fluorene		86-73-7	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	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 U
2-Methylnaphthalene		91-57-6	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	10 U
Naphthalene		91-20-3	10*	8.4	2 U	2 U	2 U	0.83 J	2 U	2 U	2 U	0.73 J	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	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	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	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	9.9	ND	ND	ND	0.83	ND	ND	ND	0.73	ND	ND	ND	ND

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Downgradient of the LIRR ROW												
Aquifer Zone				Shallow										Intermediate		
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3
Sample Name				OU3MW-13S	OU3MW-13S	OU3MW-13S	OU3MW-19S	OU3MW-19S	OU3MW-19S	OU3MW-19S	OU3MW-20S	OU3MW-20S	OU3MW-20S	OU3MW-20S	OU3MW-07I	OU3MW-07I
Start Depth				2	2	2	2	2	2	2	2	2	2	2	15	15
End Depth				12	12	12	12	12	12	12	12	12	12	20	20	
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date				8/10/2021	2/7/2022	6/14/2022	8/2/2021	10/19/2021	1/13/2022	5/9/2022	8/2/2021	10/19/2021	1/19/2022	5/9/2022	7/13/2021	10/6/2021
Parent Sample Code																
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	1	5.9	1 U	1.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
Toluene		108-88-3	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5	1.4	1 U	1 U	1 U	
Ethylbenzene		100-41-4	5	37	1 U	1.5	4	3.1	1.7	1.1	1 U	1 U	1 U	1 U	1 U	
Total Xylene		1330-20-7	5	66	2 U	2.2	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	
Total BTEX (ND=0)		TBTEX_ND0	NE	108.9	ND	5.2	4	3.1	1.7	1.1	1.5	1.4	ND	ND	ND	
PAH17	µg/L															
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Acenaphthylene		208-96-8	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	
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	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	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	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	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Naphthalene		91-20-3	10*	2 U	2 U	2 U	2 U	2 U	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	10 U	10 U	10 U	10 U	10 U	10 U	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	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Downgradient of the LIRR ROW													
Aquifer Zone				Intermediate													
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3
Sample Name				OU3MW-071	DUP-06	OU3MW-071	OU3MW-0712	OU3MW-0712	OU3MW-0712	OU3MW-0712	OU3MW-0712	OU3MW-0713	OU3MW-0713	OU3MW-0713	OU3MW-0714	OU3MW-0714	OU3MW-0714
Start Depth				15	15	15	20	20	20	20	25	25	25	35	35	35	35
End Depth				20	20	20	25	25	25	25	30	30	30	40	40	40	40
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				2/2/2022	2/2/2022	4/7/2022	7/13/2021	10/6/2021	2/2/2022	4/7/2022	7/13/2021	2/2/2022	4/7/2022	7/13/2021	10/6/2021	10/6/2021	2/2/2022
Parent Sample Code					OU3MW-071												
Analyte	Units	CAS no.	NYS AWQS														
BTEX	µg/L																
Benzene		71-43-2	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	1 U	1 U
Toluene		108-88-3	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 U	1 U
Ethylbenzene		100-41-4	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 U	1 U
Total Xylene		1330-20-7	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	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAH17	µg/L																
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	2 U	2 U
Dibenz(a,h)anthracene		53-70-3	NE	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ
Fluoranthene		206-44-0	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	10 U	10 U
Fluorene		86-73-7	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	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 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	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	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 U	1.9 J
Phenanthrene		85-01-8	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	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	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Downgradient of the LIRR ROW													
Aquifer Zone				Intermediate													
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	
Sample Name				OU3MW-0714	MW-64	MW-64	MW-64	MW-64	MW-64	MW-64	MW-65	MW-65	MW-65	OU3MW-19I	OU3MW-19I	OU3MW-19I	OU3MW-19I
Start Depth				35	19	19	19	19	19	19	11	11	11	20	20	20	20
End Depth				40	24	24	24	24	24	24	16	16	16	25	25	25	25
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
Sample Date				4/7/2022	7/13/2021	7/30/2021	12/21/2021	2/7/2022	6/9/2022	12/21/2021	1/25/2022	6/14/2022	8/2/2021	10/19/2021	1/13/2022	5/9/2022	
Parent Sample Code																	
Analyte	Units	CAS no.	NYS AWQS														
BTEX	µg/L																
Benzene		71-43-2	1	1 U	0.77 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	8.3	1 U	1 U	0.61 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	1 U	87	14 J	1 U	13	1 U	1 U	1 U	5.9	1 U	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5	2 U	48	25 J	1.3 J	18	2 U	2 U	2 U	7.7	2 U	2 U	2 U	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	144.07	39	1.3	31.61	ND	ND	ND	13.6	ND	ND	ND	ND	ND
PAH17	µg/L																
Acenaphthene		83-32-9	20*	10 U	1.3 J	1.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	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	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	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	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	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	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	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	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	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	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	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	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 U	2 U
2-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	10 U	2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*	2 U	15	9.7	2 U	1.5 J	2 U	2 U	2 U	12	2 U	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	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	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	10 U	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	16.3	11.5	ND	3.5	ND	ND	ND	12	ND	ND	ND	ND	ND

Table 4-13. OU-3 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Downgradient of the LIRR ROW												
Aquifer Zone				Intermediate												
Operable Unit				OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	OU3	
Sample Name				OU3MW-1912	OU3MW-1912	OU3MW-1912	DUP-03	OU3MW-1912	OU3MW-201	OU3MW-201	OU3MW-201	OU3MW-201	OU3MW-201	OU3MW-201	OU3MW-201	
Start Depth				30	30	30	30	30	20	20	20	20	20	30	30	
End Depth				35	35	35	35	35	25	25	25	25	25	35	35	
Depth Unit				ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	
Sample Date				8/2/2021	10/19/2021	1/13/2022	1/13/2022	5/9/2022	8/5/2021	10/19/2021	1/19/2022	5/9/2022	8/5/2021	10/20/2021	1/19/2022	5/9/2022
Parent Sample Code							OU3MW-1912									
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	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	1 U
Toluene		108-88-3	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	0.41 J
Ethylbenzene		100-41-4	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	5.3
Total Xylene		1330-20-7	5	1.5 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	57
Total BTEX (ND=0)		TBTEX_ND0	NE	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88	62.71
PAH17	µg/L															
Acenaphthene		83-32-9	20*	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	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	3.7 J
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	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	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	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	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	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	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	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	1 U
Fluoranthene		206-44-0	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	10 U
Fluorene		86-73-7	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	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 U
2-Methylnaphthalene		91-57-6	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	10 U
Naphthalene		91-20-3	10*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	91
Phenanthrene		85-01-8	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	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	10 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94.7

Table 4-14. OU-4 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																					
		Sampling Date																					
		2002		2003			2004				2005				2006				2007				
Jun/Jul	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec			
WCMW-01S	2.0 - 12.0	5	1	0	0	0	0	0	11	0	0	0	10	0	0	0	23	0	0	0	13	9	
WCMW-01I	35.0 - 45.0	0	0	0	0	0	--	0	0	--	0	--	--	--	0	--	--	--	0	--	0	1	
WCMW-01D	64.0 - 74.0	0	0	--	0	--	--	0	0	--	--	--	--	0	--	--	--	0	--	0	0	2	
WCMW-02S	3.0 - 13.0	6	0	0	0	0	0	0	0	--	0	--	--	0	0	0	0	0	0	0	4	6	
WCMW-02I	34.5 - 44.5	µg/L	0	0	0	0	--	0	0	--	--	--	--	0	--	--	--	0	--	0	0	0	
WCMW-02D	62.0 - 72.0	0	0	--	--	--	--	0	0	--	--	--	--	0	--	--	--	0	--	0	0	0	
WCMW-03S	4.83 - 9.83	--	10	12	25	0	10	25	14	0	42	14	23	10	--	0	22	20	0	12	32	0	
WCMW-03I	19.4 - 24.4	--	0	0	0	0	0	0	0	0	0	--	--	0	--	0	--	--	--	--	0	0	
WCMW-03I2	28.55 - 33.55	--	0	0	0	0	0	0	0	0	0	--	--	0	--	0	--	--	--	--	0	0	
WCMW-04S	1.6 - 11.6	--	33	0	15	16	12	0	10	40	0	16	0	0	11	10	31	16	0	12	23	25	
WCMW-04I	19.0 - 24.0	--	0	0	0	0	0	0	0	--	0	--	--	0	--	--	--	0	--	--	0	0	
WCMW-04I2	29.85 - 34.85	--	0	--	0	0	--	0	0	0	0	--	--	0	--	--	--	0	0	--	0	0	
WCMW-05S	1.15 - 11.15	--	0	0	0	0	0	0	0	0	0	--	--	0	--	0	--	--	0	0	0	0	
WCMW-05I	19.61 - 24.61	--	0	0	0	0	0	0	0	--	0	--	--	0	--	0	--	--	--	--	0	0	
WCMW-05I2	29.46 - 34.46	--	0	0	0	0	--	0	0	0	0	--	--	0	--	0	--	--	--	--	0	0	
WCMW-06S	2.0 - 12.0	--	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	0	0	0	0	
WCMW-06I	19.55 - 24.55	--	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--	--	0	0	
WCMW-06I2	29.83 - 34.83	--	0	--	0	0	--	0	--	0	--	--	--	--	--	--	--	--	--	--	0	0	
WCMW-07S	2.76 - 12.76	--	0	0	0	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07I	18.9 - 23.9	--	0	--	0	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07I2	28.95 - 33.95	--	0	--	0	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08S	4.2 - 9.2	--	0	0	0	0	--	0	0	--	--	--	--	0	--	--	--	--	--	--	0	0	
WCMW-08I	19.2 - 24.2	--	0	--	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--	--	0	0	
WCMW-08I2	26.9 - 31.9	--	0	--	0	0	--	0	0	--	--	--	--	--	--	--	--	--	--	--	0	0	
WCMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	--	--	0	0	
WCMW-10S	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	
WCMW-10D	40.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	--	--	1	0	
WCMW-11S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	80	--	148	--	--	--	--	--	--	
WCMW-11I	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	--	--	--	--	--	--	
WCMW-11D	50.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	--	--	--	--	--	--	
WCMW-12S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-14S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-14I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-14I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-14. OU-4 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																					
		Sampling Date																					
		2002		2003			2004				2005				2006				2007				
Jun/Jul	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec			
WCMW-14D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-16I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-16I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-17I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-18S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-18I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-22S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-22I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-23S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-23I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-25I	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-25D	55.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-26S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-26I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-26I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-29S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-29I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-30S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-30I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-31S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-31I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-31I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
WCMW-32S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

Table 4-14. OU-4 Summary of Expanded Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid
Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2008				2009				2010				2011				2012			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Aug	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-01S	2.0 - 12.0	2	0	12	3	3	1	4	0	1	5	10	14	1	--	--	--	--	--	--	
WCMW-01I	35.0 - 45.0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-01D	64.0 - 74.0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-02S	3.0 - 13.0	0	0	2	0	0	0	0	5	0	0	0	3	9	0	0	19	6	0	0	
WCMW-02I	34.5 - 44.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-02D	62.0 - 72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-03S	4.83 - 9.83	20	21	25	24	33	34	23	6	27	29	30	27	24	--	--	--	--	--	--	
WCMW-03I	19.4 - 24.4	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-03I2	28.55 - 33.55	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-04S	1.6 - 11.6	6	22	24	26	21	34	10	2	6	12	32	25	30	11	2	3	0	0	0	
WCMW-04I	19.0 - 24.0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	14	9	4	13	24	
WCMW-04I2	29.85 - 34.85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	
WCMW-05S	1.15 - 11.15	0	0	0	0	1	0	0	1	2	3	0	0	3	2	2	0	3	1	0	
WCMW-05I	19.61 - 24.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	9	10	8	
WCMW-05I2	29.46 - 34.46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	
WCMW-06S	2.0 - 12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-06I	19.55 - 24.55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-06I2	29.83 - 34.83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-07S	2.76 - 12.76	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	
WCMW-07I	18.9 - 23.9	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	
WCMW-07I2	28.95 - 33.95	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	
WCMW-08S	4.2 - 9.2	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	0	--	--	
WCMW-08I	19.2 - 24.2	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	0	--	--	
WCMW-08I2	26.9 - 31.9	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	0	--	--	
WCMW-09S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	
WCMW-10S	15.0 - 20.0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	0	
WCMW-10D	40.0 - 50.0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	0	
WCMW-11S	5.0 - 15.0	--	53	--	--	--	53	36	2	23	--	12	16	27	30	75	--	37	17	10	
WCMW-11I	25.0 - 35.0	--	0	--	--	--	0	0	0	0	--	0	0	0	0	0	--	0	0	0	
WCMW-11D	50.0 - 60.0	--	0	--	--	--	0	0	0	0	--	0	0	0	0	0	--	0	0	0	
WCMW-12S	3.0 - 13.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-12I	25.0 - 30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-12D	67.0 - 72.0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	--	
WCMW-13S	3.0 - 13.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	17	3	10	
WCMW-13I	25.0 - 30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-13D	65.0 - 70.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-14S	2.0 - 12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
WCMW-14I	20.0 - 25.0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2.5	
WCMW-14I2	30.0 - 35.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	

Table 4-14. OU-4 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2008				2009				2010				2011				2012			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Aug	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-14D	67.0 - 72.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-16S	2.0 - 12.0	0	0	0	0	0	2	0	9	0	0	0	0	0	--	--	--	--	--	--	
WCMW-16I	20.0 - 25.0	0	0	0	0	0	1	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-16I2	30.0 - 35.0	0	0	0	0	0	2	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-17S	2.0 - 12.0	--	--	--	--	--	5	6	2	0	1	1	1	4	--	--	--	--	--	--	
WCMW-17I	20.0 - 25.0	--	--	--	--	--	0	2	0	0	1	0	0	0	--	--	--	--	--	--	
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18S	2.0 - 12.0	--	--	--	--	--	0	0	1	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18I	20.0 - 25.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-19S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-19I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-19I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-22S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--	--	0	--	--	
WCMW-22I	25.0 - 30.0	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--	--	0	--	--	
WCMW-23S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--	--	--	--	--	
WCMW-23I	25.0 - 30.0	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--	--	--	--	--	
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	0	0	16	--	8	3	4	2	--	--	--	--	--	
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	--	0	0	0	0	--	--	--	--	--	
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	--	0	0	0	0	--	--	--	--	--	
WCMW-25I	30.0 - 35.0	--	--	--	--	--	--	0	1	0	0	0	0	0	0	0	0	0	0	--	
WCMW-25D	55.0 - 60.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-26S	2.0 - 12.0	--	--	--	--	--	--	44	78	--	35	114	21	19	47	--	45	60	67	--	
WCMW-26I	20.0 - 25.0	--	--	--	--	--	--	0	0	--	0	0	0	0	0	--	0	2	0	--	
WCMW-26I2	30.0 - 35.0	--	--	--	--	--	--	0	0	--	0	0	0	0	0	--	0	0	0	--	
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	19	4	29	16	19	31	--	--	--	--	--	--	--	
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-29S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	84	19	59	69	145	--	152	62	54	--	
WCMW-29I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	0	0	0	0	--	0	0	0	0	--	
WCMW-30S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	
WCMW-30I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	13	26	30	
WCMW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	
WCMW-31S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	1	0	2	
WCMW-31I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	
WCMW-31I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	
WCMW-32S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	

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 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-01S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-01I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-01D	64.0 - 74.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-02S	3.0 - 13.0	0	0	0	0	0	0	0	0	0	0	--	0	--	--	--	--	--	--	--	
WCMW-02I	34.5 - 44.5	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-02D	62.0 - 72.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-03S	4.83 - 9.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-03I	19.4 - 24.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-03I2	28.55 - 33.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-04S	1.6 - 11.6	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-04I	19.0 - 24.0	17	16	12	9	8	13	8	8	8	7	7	11	4	0	4	10	1	6	5	3
WCMW-04I2	29.85 - 34.85	0	3	6	2	1	0	0	0	0	0	--	--	--	0	--	--	--	--	--	
WCMW-05S	1.15 - 11.15	2	0	0	0	0	0	0	--	--	--	--	--	0	--	--	--	--	--	--	
WCMW-05I	19.61 - 24.61	5	8	9	4	4	4	4	0	1	1	0	0	0	0	0	0	0	3	2	
WCMW-05I2	29.46 - 34.46	0	0	0	0	0	0	0	0	0	--	0	0	0	0	0	0	--	0	2	
WCMW-06S	2.0 - 12.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-06I	19.55 - 24.55	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-06I2	29.83 - 34.83	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07S	2.76 - 12.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07I	18.9 - 23.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07I2	28.95 - 33.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08S	4.2 - 9.2	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08I	19.2 - 24.2	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08I2	26.9 - 31.9	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-10S	15.0 - 20.0	0	0	--	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
WCMW-10D	40.0 - 50.0	0	0	--	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
WCMW-11S	5.0 - 15.0	6	2	4	2	8	15	9	3	1	20	0	0	--	--	--	--	--	--	--	
WCMW-11I	25.0 - 35.0	0	0	7	8	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-11D	50.0 - 60.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12S	3.0 - 13.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12D	67.0 - 72.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13S	3.0 - 13.0	0	0	0	0	9	1	1	6	0	0	1	0	0	0	--	--	--	--	--	
WCMW-13I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13D	65.0 - 70.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-14S	2.0 - 12.0	0	0	0	0	0	0	0	3	0	0	0	--	0	0	0	0	0	1	0	
WCMW-14I	20.0 - 25.0	1	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	
WCMW-14I2	30.0 - 35.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	

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 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-14D	67.0 - 72.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18WWT	2.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19S	2.0 - 12.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19I	20.0 - 25.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19I2	30.0 - 35.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-22S	2.0 - 12.0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	
WCMW-22I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-23S	2.0 - 12.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-23I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-25I	30.0 - 35.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-25D	55.0 - 60.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-26S	2.0 - 12.0	7	4	68	205	64	31	29	0	15	87	261	256	--	--	--	--	--	--	--	
WCMW-26I	20.0 - 25.0	0	0	0	0	1	0	0	169	0	0	0	0	--	--	--	--	--	--	--	
WCMW-26I2	30.0 - 35.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-29S	2.0 - 12.0	154	182	22	19	77	58	68	28	185	88	38	18	--	--	--	--	--	--	--	
WCMW-29I	20.0 - 25.0	--	0	--	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	
WCMW-30S	2.0 - 12.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-30I	20.0 - 25.0	14	21	18	13	17	10	13	21	4	15	14	16	3	9	8	7	0	2	6	3
WCMW-30I2	30.0 - 35.0	0	0	0	0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	
WCMW-31S	2.0 - 12.0	4	0	0	0	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	
WCMW-31I	20.0 - 25.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-31I2	30.0 - 35.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-32S	2.0 - 12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table 4-14. OU-4 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020			2021				2022							
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								
WCMW-01S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	23	4	0	0		
WCMW-01I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0		
WCMW-01D	64.0 - 74.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0		
WCMW-02S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	19	1	0	0		
WCMW-02I	34.5 - 44.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-02D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-03S	4.83 - 9.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	42	19	0	0		
WCMW-03I	19.4 - 24.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-03I2	28.55 - 33.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-04S	1.6 - 11.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	40	12	0	0		
WCMW-04I	19.0 - 24.0	1	0	--	--	--	--	--	--	0	3	--	--	--	--	--	--	0	24	4	0	0		
WCMW-04I2	29.85 - 34.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	6	0	0	0		
WCMW-05S	1.15 - 11.15	--	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	0	0		
WCMW-05I	19.61 - 24.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0		
WCMW-05I2	29.46 - 34.46	0	0	0	0	--	0	--	--	--	0	--	0	0	0	0	0	0	2	0	0	0		
WCMW-06S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-06I	19.55 - 24.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-06I2	29.83 - 34.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-07S	2.76 - 12.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-07I	18.9 - 23.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-07I2	28.95 - 33.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-08S	4.2 - 9.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-08I	19.2 - 24.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-08I2	26.9 - 31.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-10S	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-10D	40.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0		
WCMW-11S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	148	26	0	0		
WCMW-11I	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	8	1	0	0		
WCMW-11D	50.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0		
WCMW-12S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-12I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-12D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0		
WCMW-13S	3.0 - 13.0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	17	2	0	0		
WCMW-13I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-13D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		
WCMW-14S	2.0 - 12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	0	3	0	0	0		
WCMW-14I	20.0 - 25.0	0	0	0	0	0	0	--	--	--	0	--	--	0	--	--	--	0	3	0	0	0		
WCMW-14I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0		

Table 4-14. OU-4 Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total BTEX Groundwater Concentration (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020			2021				2022							
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								
WCMW-14D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	9	1	0	0	
WCMW-16I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0	
WCMW-16I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0	
WCMW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	6	3	0	0	
WCMW-17I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0	
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-18S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0	
WCMW-18I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-22S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-22I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-23S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-23I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	16	6	0	0	
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-25I	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0	
WCMW-25D	55.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-26S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	--	0	261	71	7	7	
WCMW-26I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	169	8	0	0	
WCMW-26I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	31	20	0	0	
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-29S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	96	--	18	185	79	96	96	
WCMW-29I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	0	0	0	0	
WCMW-30S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-30I	20.0 - 25.0	0	0	2	0	0	0	0	4	0	7	0	0.32	0	8	0	6	0	0	30	8	0	8	
WCMW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-31S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4	1	0	0	
WCMW-31I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-31I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	
WCMW-32S	2.0 - 12.0	0	0	0	0	0	0	0	0	0	0	0	--	0	0	--	--	--	0	0	0	0	0	

Notes for groundwater tables are compiled at the end of the Tables in this section.

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																				
		Sampling Date																				
		2002		2003			2004			2005				2006				2007				
Jun/Jul	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec		
WCMW-01S	2.0 - 12.0	33	756	24	10	117	0	19	228	240	0	51	298	14	0	10	340	130	78	291	203	345
WCMW-01I	35.0 - 45.0	2	2	0	0	0	--	0	0	--	0	--	--	--	0	--	--	--	0	--	0	0
WCMW-01D	64.0 - 74.0	45	35	--	0	--	--	0	0	--	--	--	--	--	0	--	--	--	0	--	0	0
WCMW-02S	3.0 - 13.0	79	125	0	0	62	0	0	44	--	15	--	--	--	0	0	30	0	0	0	77	101
WCMW-02I	34.5 - 44.5	µg/L	4	0	0	0	--	0	0	--	--	--	--	--	0	--	--	--	0	--	0	0
WCMW-02D	62.0 - 72.0	0	0	--	--	--	--	0	0	--	--	--	--	--	0	--	--	--	0	--	0	0
WCMW-03S	4.83 - 9.83	--	74	393	419	481	34	293	458	350	235	171	800	376	--	242	339	233	198	240	305	44
WCMW-03I	19.4 - 24.4	--	268	1,120	1,100	1,004	1,243	1,261	1,395	1,182	1,532	--	--	1,423	--	1,770	--	--	--	--	255	315
WCMW-03I2	28.55 - 33.55	--	327	340	402	348	49	133	191	127	94	--	--	109	--	83	--	--	--	--	5	37
WCMW-04S	1.6 - 11.6	--	1,080	141	69	270	50	0	219	836	17	136	204	153	116	57	264	445	95	214	194	326
WCMW-04I	19.0 - 24.0	--	221	174	142	99	0	62	90	--	81	--	--	155	--	--	--	144	--	--	142	94
WCMW-04I2	29.85 - 34.85	--	0	--	0	0	--	0	17	95	0	--	--	0	--	--	--	0	--	--	0	0
WCMW-05S	1.15 - 11.15	--	0	31	0	0	0	10	0	14	12	--	--	0	--	0	--	--	0	0	3	3
WCMW-05I	19.61 - 24.61	--	156	329	243	215	298	227	245	--	276	--	--	338	--	286	--	--	--	--	242	287
WCMW-05I2	29.46 - 34.46	--	0	0	15	0	--	0	0	214	0	--	--	0	--	0	--	--	--	--	7	31
WCMW-06S	2.0 - 12.0	--	39	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	0	0	1	0
WCMW-06I	19.55 - 24.55	--	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--	--	52	0
WCMW-06I2	29.83 - 34.83	--	0	--	0	0	--	0	0	--	--	--	--	--	--	--	--	--	--	--	0	11
WCMW-07S	2.76 - 12.76	--	0	0	0	56	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-07I	18.9 - 23.9	--	0	--	0	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-07I2	28.95 - 33.95	--	0	--	0	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-08S	4.2 - 9.2	--	0	0	0	0	--	0	0	--	--	--	--	--	0	--	--	--	--	--	0	0
WCMW-08I	19.2 - 24.2	--	0	--	0	0	0	0	0	--	--	--	--	--	--	--	--	--	--	--	0	0
WCMW-08I2	26.9 - 31.9	--	0	--	0	0	--	0	0	--	--	--	--	--	--	--	--	--	--	--	0	0
WCMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	--	0	0
WCMW-10S	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	21	0	0	0	0	0
WCMW-10D	40.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	--	--	--	--	0	0
WCMW-11S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	1,037	--	590	--	--	--	--	--
WCMW-11I	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	--	--	--	--	--
WCMW-11D	50.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	0	--	0	--	--	--	--	--
WCMW-12S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-12I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-12D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-13S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-13I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-13D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-14S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-14I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
WCMW-14I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2002		2003			2004			2005				2006				2007			
Jun/Jul	Nov/Dec	Feb-Apr	Jul/Aug	Sep/Oct	Feb/Mar	Apr/May	Jul/Aug	Nov/Dec	Feb/Mar	Jun	Aug	Nov/Dec	Mar	Jun	Jul/Aug	Nov/Dec	Mar	May-Jul	Aug-Oct	Oct-Dec	
WCMW-14D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-22S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-22I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-23S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-23I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-25I	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-25D	55.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-26S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-26I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-26I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-29S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-29I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-30S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-30I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-31S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-31I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-31I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-32S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid
Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2008				2009				2010				2011				2012			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Aug	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-01S	2.0 - 12.0	47	9	353	77	0	16	26	3	4	14	115	49	18	--	--	--	--	--	--	
WCMW-01I	35.0 - 45.0	0	0	2	0	0	0	46	0	1	0	0	0	0	--	--	--	--	--	--	
WCMW-01D	64.0 - 74.0	0	0	0	0	0	0	2	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-02S	3.0 - 13.0	0	4	51	27	0	5	0	12	3	0	2	56	38	9	15	69	94	87	58	
WCMW-02I	34.5 - 44.5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
WCMW-02D	62.0 - 72.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	1	
WCMW-03S	4.83 - 9.83	122	12	102	239	243	358	419	237	501	6	327	363	1,532	--	--	--	--	--	--	
WCMW-03I	19.4 - 24.4	939	134	290	1,107	142	1,146	994	1,743	1,127	1,332	1,213	1,101	6	--	--	--	--	--	--	
WCMW-03I2	28.55 - 33.55	6	0	25	24	0	2	5	15	0	535	0	9	8	--	--	--	--	--	--	
WCMW-04S	1.6 - 11.6	186	72	337	332	43	16	272	197	204	227	251	390	369	262	315	132	98	60	22	
WCMW-04I	19.0 - 24.0	70	66	96	100	33	108	101	46	15	30	97	130	95	44	174	432	411	251	198	
WCMW-04I2	29.85 - 34.85	0	0	0	0	0	0	0	2	0	0	0	1	0	0	285	79	73	126	73	
WCMW-05S	1.15 - 11.15	5	3	4	2	5	7	6	8	8	7	38	34	284	8	42	0	94	74	76	
WCMW-05I	19.61 - 24.61	162	153	121	150	170	241	411	432	270	83	43	217	28	136	407	173	225	147	177	
WCMW-05I2	29.46 - 34.46	0	0	39	63	0	48	5	0	0	0	19	30	0	0	778	264	306	266	112	
WCMW-06S	2.0 - 12.0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-06I	19.55 - 24.55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-06I2	29.83 - 34.83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-07S	2.76 - 12.76	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	
WCMW-07I	18.9 - 23.9	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	
WCMW-07I2	28.95 - 33.95	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	--	--	
WCMW-08S	4.2 - 9.2	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	0	--	--	
WCMW-08I	19.2 - 24.2	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	0	--	--	
WCMW-08I2	26.9 - 31.9	0	--	0	--	--	--	--	--	0	--	--	--	--	--	--	--	0	--	--	
WCMW-09S	5.0 - 15.0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	--	--	--	--	--	
WCMW-10S	15.0 - 20.0	0	0	0	0	0	0	0	5	0	0	--	--	--	--	--	--	--	--	0	
WCMW-10D	40.0 - 50.0	0	0	0	0	0	0	0	3	0	0	--	--	--	--	--	--	--	--	0	
WCMW-11S	5.0 - 15.0	--	705	--	--	--	624	637	238	159	--	496	1,350	386	1,286	1,258	--	375	392	266	
WCMW-11I	25.0 - 35.0	--	0	--	--	--	0	10	1	20	--	0	62	36	5	182	--	61	188	318	
WCMW-11D	50.0 - 60.0	--	0	--	--	--	0	0	0	2	--	0	0	0	0	0	--	0	0	--	
WCMW-12S	3.0 - 13.0	2	5	4	1	4	13	0	3	0	2	0	0	0	2	0	0	0	3	5	
WCMW-12I	25.0 - 30.0	0	0	0	0	0	5	5	16	0	0	0	0	0	0	30	4	1	0	--	
WCMW-12D	67.0 - 72.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-13S	3.0 - 13.0	0	0	1	53	0	0	0	0	1	0	0	0	0	0	2	75	229	219	156	
WCMW-13I	25.0 - 30.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	
WCMW-13D	65.0 - 70.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-14S	2.0 - 12.0	0	0	0	0	0	6	0	4	20	23	26	0	3	0	29	263	143	56	81	
WCMW-14I	20.0 - 25.0	16	77	0	2	2	50	64	81	149	214	149	65	24	25	376	125	125	258	165	
WCMW-14I2	30.0 - 35.0	0	0	70	10	1	11	0	18	57	25	95	201	160	9	71	0	0	0	--	

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid
Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2008				2009				2010				2011				2012			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Aug	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-14D	67.0 - 72.0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	--	
WCMW-16S	2.0 - 12.0	4	28	57	0	24	22	0	1,971	2,259	337	43	56	51	--	--	--	--	--	--	
WCMW-16I	20.0 - 25.0	0	0	0	0	0	18	0	2	13	6	14	14	6	--	--	--	--	--	--	
WCMW-16I2	30.0 - 35.0	0	0	0	0	0	4	55	5	15	10	17	0	1	--	--	--	--	--	--	
WCMW-17S	2.0 - 12.0	--	--	--	--	--	295	226	201	141	339	431	407	339	--	--	--	--	--	--	
WCMW-17I	20.0 - 25.0	--	--	--	--	--	292	342	38	186	338	394	322	258	--	--	--	--	--	--	
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	0	16	0	12	12	31	0	20	--	--	--	--	--	--	
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18S	2.0 - 12.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18I	20.0 - 25.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	0	0	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-19S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-19I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-19I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	0	2	0	0	0	0	0	0	0	0	0	0	0	
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-22S	2.0 - 12.0	--	--	--	--	--	--	61	56	54	--	--	--	--	--	--	--	59	--	--	
WCMW-22I	25.0 - 30.0	--	--	--	--	--	--	5	1	0	--	--	--	--	--	--	--	0	--	--	
WCMW-23S	2.0 - 12.0	--	--	--	--	--	--	34	16	0	--	--	--	--	--	--	--	--	--	--	
WCMW-23I	25.0 - 30.0	--	--	--	--	--	--	0	0	0	--	--	--	--	--	--	--	--	--	--	
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	237	336	--	215	170	158	271	--	--	--	--	--	
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	10	53	--	32	40	98	58	--	--	--	--	--	
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	0	0	--	0	0	0	0	--	--	--	--	--	
WCMW-25I	30.0 - 35.0	--	--	--	--	--	--	--	0	54	0	0	0	0	0	20	0	0	7	0	
WCMW-25D	55.0 - 60.0	--	--	--	--	--	--	--	0	0	0	0	0	0	0	0	0	0	0	0	
WCMW-26S	2.0 - 12.0	--	--	--	--	--	--	--	350	232	--	394	146	204	331	243	--	352	436	290	
WCMW-26I	20.0 - 25.0	--	--	--	--	--	--	--	47	24	--	87	28	0	26	56	--	7	25	12	
WCMW-26I2	30.0 - 35.0	--	--	--	--	--	--	--	3	24	--	11	10	7	5	0	--	1	9	3	
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	141	0	278	708	0	699	--	--	--	--	--	--	
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	0	0	0	0	0	0	--	--	--	--	--	--	
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	251	36	97	396	301	128	--	--	--	--	--	--	
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	2	0	0	0	0	0	--	--	--	--	--	--	
WCMW-29S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	2,391	2,154	1,092	1,599	--	--	2,374	1,420	1,986	
WCMW-29I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	43	29	10	17	--	--	5	10	24	
WCMW-30S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	49	18	
WCMW-30I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	169	486	654	
WCMW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	12	1	
WCMW-31S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	427	353	53	
WCMW-31I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	31	18	9	
WCMW-31I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	69	4	0	
WCMW-32S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	304	286	189	

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-01S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-01I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-01D	64.0 - 74.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-02S	3.0 - 13.0	67.5	84	62	77	86	45	78	43	27	25	--	--	--	48	--	--	--	--	--	
WCMW-02I	34.5 - 44.5	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-02D	62.0 - 72.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-03S	4.83 - 9.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-03I	19.4 - 24.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-03I2	28.55 - 33.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-04S	1.6 - 11.6	35	12	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-04I	19.0 - 24.0	299	306	149	232	221	212	352	303	162	280	187	246	265	304	245	254	1	238	305	349
WCMW-04I2	29.85 - 34.85	41	95	14	116	28	13	24	18	7	2	--	--	--	27	--	--	--	--	--	
WCMW-05S	1.15 - 11.15	97	49	2	39	94	48	24	--	--	--	--	--	--	2	--	--	--	--	--	
WCMW-05I	19.61 - 24.61	162	229	100	230	137	220	324	319	164	190	176	201	180	152	138	186	0	183	237	211
WCMW-05I2	29.46 - 34.46	173	350	55	237	138	56	100	51	13	100	--	123	76	155	168	121	--	71	--	78
WCMW-06S	2.0 - 12.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-06I	19.55 - 24.55	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-06I2	29.83 - 34.83	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07S	2.76 - 12.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07I	18.9 - 23.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-07I2	28.95 - 33.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08S	4.2 - 9.2	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08I	19.2 - 24.2	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-08I2	26.9 - 31.9	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-10S	15.0 - 20.0	0	0	--	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
WCMW-10D	40.0 - 50.0	0	0	--	0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	
WCMW-11S	5.0 - 15.0	129	56	32	77	244	102	77	58	61	127	41	47	--	--	--	--	--	--	--	
WCMW-11I	25.0 - 35.0	73	25	392	380	136	25	46	249	25	18	192	54	--	--	--	--	--	--	--	
WCMW-11D	50.0 - 60.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12S	3.0 - 13.0	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12I	25.0 - 30.0	--	89	--	--	--	40	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-12D	67.0 - 72.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13S	3.0 - 13.0	2	0	134	176	185	9	157	59	0	0	43	51	3	0	--	--	--	--	--	
WCMW-13I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-13D	65.0 - 70.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-14S	2.0 - 12.0	58	81	15	53	64	41	36	31	42	39	66	--	37	28	72	78	0	42	74	85
WCMW-14I	20.0 - 25.0	149	167	243	256	96	86	234	106	5	2	58	180	7	17	188	156	0	11	193	173
WCMW-14I2	30.0 - 35.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
National Grid
Bay Shore/Brightwaters Former MGP Site
Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																			
		Sampling Date																			
		2013				2014				2015				2016				2017			
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec		
WCMW-14D	67.0 - 72.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-16I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19S	2.0 - 12.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19I	20.0 - 25.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-19I2	30.0 - 35.0	--	0	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-22S	2.0 - 12.0	--	37	--	--	--	--	--	--	27	--	--	--	--	--	--	--	--	--	--	
WCMW-22I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-23S	2.0 - 12.0	--	17	--	--	--	13	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-23I	25.0 - 30.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-25I	30.0 - 35.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-25D	55.0 - 60.0	--	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-26S	2.0 - 12.0	217	190	406	2,081	748	335	357	557	257	404	973	1,597	--	--	--	--	--	--	--	
WCMW-26I	20.0 - 25.0	86	111	5	60	55	10	42	19	74	3	27	69	--	--	--	--	--	--	--	
WCMW-26I2	30.0 - 35.0	--	2	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-29S	2.0 - 12.0	2,123	1,615	1,746	2,172	1,756	1,952	1,889	1,466	2,390	1,424	1,175	1,191	--	--	--	--	--	--	--	
WCMW-29I	20.0 - 25.0	--	60	--	208	87	36	41	93	8	22	107	140	--	--	--	--	--	--	--	
WCMW-30S	2.0 - 12.0	7	16	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-30I	20.0 - 25.0	373	602	663	606	295	307	458	478	102	339	267	352	178	285	313	309	0	255	404	288
WCMW-30I2	30.0 - 35.0	46	0	20	118	0	0	0	--	--	0	--	--	--	0	--	--	--	--	--	
WCMW-31S	2.0 - 12.0	241	199	35	22	68	45	18	--	--	36	--	--	--	48	--	--	--	--	--	
WCMW-31I	20.0 - 25.0	7	10	--	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-31I2	30.0 - 35.0	0	0	--	--	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
WCMW-32S	2.0 - 12.0	247	269	97	25	184	167	63	256	280	12	20	13	141	23	--	0	0	116	--	2

Table 4-15. OU-4 Summary Historical Total PAH Groundwater Analytical Results
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 National Grid
 Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																		Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																						
		2018				2019				2020				2021				2022						
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun								
WCMW-01S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	756	115	0	0			
WCMW-01I	35.0 - 45.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	46	2	0	0			
WCMW-01D	64.0 - 74.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	45	4	0	0			
WCMW-02S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	125	36	0	0			
WCMW-02I	34.5 - 44.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	4	0	0	0			
WCMW-02D	62.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5	0	0	0			
WCMW-03S	4.83 - 9.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	1,532	317	0	0			
WCMW-03I	19.4 - 24.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	1,770	967	0	0			
WCMW-03I2	28.55 - 33.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	535	111	0	0			
WCMW-04S	1.6 - 11.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1,080	203	0	0			
WCMW-04I	19.0 - 24.0	99	108.6	--	--	--	--	--	58	226	--	--	--	--	--	--	0	432	170	0	0			
WCMW-04I2	29.85 - 34.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	285	29	0	0			
WCMW-05S	1.15 - 11.15	--	14.6	31	--	--	--	--	--	--	--	--	--	--	--	--	0	284	27	0	0			
WCMW-05I	19.61 - 24.61	335	313.6	173	320	121	310	255	305	195	12	247	153	--	185	--	197	131	0	432	211	131	197	
WCMW-05I2	29.46 - 34.46	1	5.3	148	7	--	0	--	--	--	161	--	0	0	49	28	0	0	0	778	84	0	49	
WCMW-06S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	39	1	0	0	0	0	
WCMW-06I	19.55 - 24.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	52	2	0	0	0	0	
WCMW-06I2	29.83 - 34.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	11	0	0	0	0	0	
WCMW-07S	2.76 - 12.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	56	8	0	0	0	0	
WCMW-07I	18.9 - 23.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	
WCMW-07I2	28.95 - 33.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	
WCMW-08S	4.2 - 9.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	
WCMW-08I	19.2 - 24.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	
WCMW-08I2	26.9 - 31.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	
WCMW-09S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0	0	0	
WCMW-10S	15.0 - 20.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	21	1	0	0	0	0	
WCMW-10D	40.0 - 50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	0	0	0	0	
WCMW-11S	5.0 - 15.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	32	1,350	402	30	30	30	30	
WCMW-11I	25.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	392	93	0	0	0	
WCMW-11D	50.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0	0	0	
WCMW-12S	3.0 - 13.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	13	2	0	0	0	0	
WCMW-12I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	89	9	0	0	0	0	
WCMW-12D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0	0	0	
WCMW-13S	3.0 - 13.0	--	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--	0	229	49	0	0	0	0	
WCMW-13I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0	0	0	
WCMW-13D	65.0 - 70.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	1	0	0	0	0	0	
WCMW-14S	2.0 - 12.0	15	91.5	123	1	100	0	19	41	35	1	3	0	0	--	--	0	263	41	0	0	0	0	
WCMW-14I	20.0 - 25.0	1	0.69	12	2	0	0	--	--	--	17	--	--	0	--	--	0	376	95	0	0	0	0	
WCMW-14I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	201	35	0	0	0	0	

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 National Grid
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 Bay Shore, NY

Well ID	Screen Interval (feet bgs)	Total PAH Groundwater Concentration (µg/L)																			Historic Minimum	Historic Maximum	Historic Average	Current Minimum	Current Maximum
		Sampling Date																							
		2018				2019				2020				2021				2022							
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun									
WCMW-14D	67.0 - 72.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0				
WCMW-16S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2,259	373	0	0				
WCMW-16I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	18	6	0	0				
WCMW-16I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	55	8	0	0				
WCMW-17S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	141	431	297	0	0				
WCMW-17I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	38	394	271	0	0				
WCMW-17I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	31	11	0	0				
WCMW-18WT	2.0 - 7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-18S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-18I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-18I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-19S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-19I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-19I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	3	0	0	0				
WCMW-20S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0				
WCMW-20I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-20I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-21S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-21I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-21I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-22S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27	61	49	0	0				
WCMW-22I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	5	1	0	0				
WCMW-23S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	34	16	0	0				
WCMW-23I	25.0 - 30.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-24S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	158	336	231	0	0				
WCMW-24I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	98	49	0	0				
WCMW-24I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-25I	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	54	6	0	0				
WCMW-25D	55.0 - 60.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-26S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9	146	2,081	505	9	9				
WCMW-26I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	0	111	40	4	4				
WCMW-26I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	24	6	0	0				
WCMW-27S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	708	304	0	0				
WCMW-27I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0	0	0	0				
WCMW-28S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	36	396	202	0	0				
WCMW-28I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	2	0	0	0				
WCMW-29S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	276	1,092	2,391	1,785	276	276				
WCMW-29I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	5	208	55	3	3				
WCMW-30S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	49	16	0	0				
WCMW-30I	20.0 - 25.0	143	39.77	130	119	56	13	139	106	101	28	0	119	90	108	124	235	0	663	266	0	235			
WCMW-30I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	118	24	0	0				
WCMW-31S	2.0 - 12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	427	122	0	0				
WCMW-31I	20.0 - 25.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	31	12	0	0				
WCMW-31I2	30.0 - 35.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	69	10	0	0				
WCMW-32S	2.0 - 12.0	35	70.2	8	31	116	144	8	2	0	2	0	--	0	0	--	0	304	92	0	0				

Notes for groundwater tables are compiled at the end of the Tables in this section.

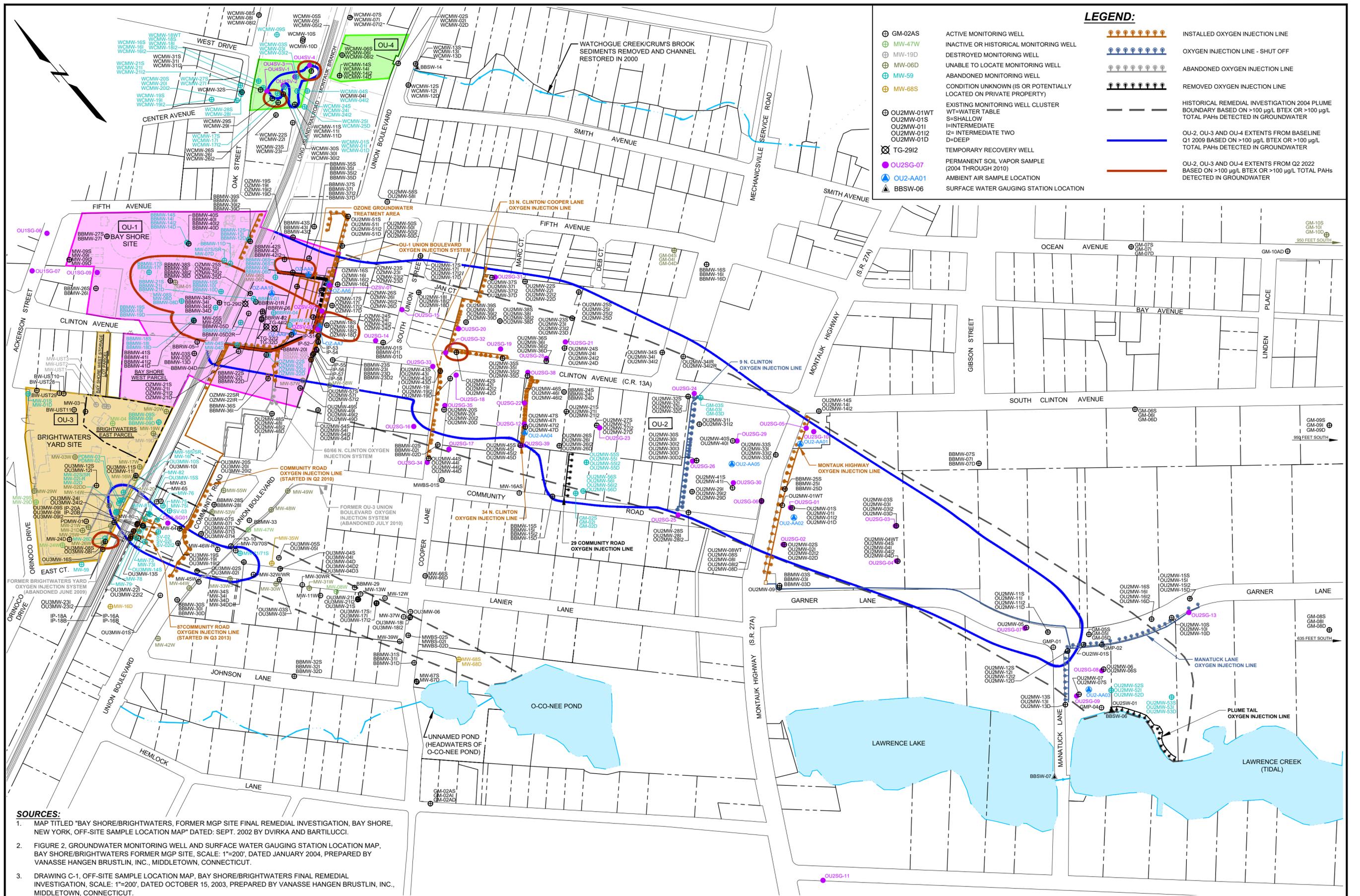
Table 4-16. OU-4. Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area				Former Cesspool Area									
Aquifer Zone				Shallow				Intermediate					
Operable Unit	OU4	OU4	OU4	OU4	OU4	OU4	OU4	OU4	OU4	OU4	OU4	OU4	OU4
Sample Name	WCMW-11S	WCMW-26S	WCMW-29S	WCMW-32S	WCMW-05I	WCMW-05I	WCMW-05I	WCMW-05I2	DUP-03	WCMW-05I2	WCMW-05I2		
Start Depth	5	2	2	2	19.61	19.61	19.61	29.46	29.46	29.46	29.46		
End Depth	15	12	12	12	24.61	24.61	24.61	34.46	34.46	34.46	34.46		
Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft		
Sample Date	5/13/2022	5/13/2022	5/13/2022	7/27/2021	9/16/2021	3/1/2022	4/25/2022	7/27/2021	7/27/2021	12/22/2021	3/1/2022		
Analyte	Units	CAS no.	NYS AWQS										
BTEX	µg/L												
Benzene		71-43-2	1	1 U	1 U	0.27 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene		108-88-3	5	1 U	1 U	0.38 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		100-41-4	5	1 U	4.4	62	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5	2 U	2.3	33	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Total BTEX		TBTEX_ND0	NE	ND	6.7	95.65	ND	ND	ND	ND	ND	ND	ND
PAH17	µg/L												
Acenaphthene		83-32-9	20*	18	5.6 J	160	10 U	40	66	44	3.2 J	2.7 J	2.1 J
Acenaphthylene		208-96-8	NE	10 U	10 U	2.6 J	10 U	7.8 J	7.7 J	4.8 J	13	11	11
Anthracene		120-12-7	50*	10 U	10 U	10	10 U	9.8 J	7.4 J	6.8 J	2.6 J	2.5 J	10 U
Benzo(a)anthracene		56-55-3	0.002*	1 U	1 U	1 U	1 U	2.3	0.66 J	0.87 J	1 U	1 U	1 U
Benzo(b)fluoranthene		205-99-2	0.002*	2 U	2 U	2 U	2 U	0.95 J	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
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
Benzo(a)pyrene		50-32-8	ND	1 U	1 U	1 U	1 U	1.4	1 U	1 U	1 U	1 U	1 U
Chrysene		218-01-9	0.002*	2 U	2 U	2 U	2 U	2.3	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
Fluoranthene		206-44-0	50*	10 U	0.99 J	10 U	10 U	5.2 J	2.6 J	2.9 J	10 U	10 U	10 U
Fluorene		86-73-7	50*	5.7 J	10 U	56	10 U	34	38	25	9.6 J	9.8 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-Methylnaphthalene		91-57-6	NE	10 U	10 U	10 U	10 U	12	32	15	5.5 J	1.1 J	5.9 J
Naphthalene		91-20-3	10*	2.8	2 U	2 U	2 U	18	16	7.3	2 U	2 U	4.6
Phenanthrene		85-01-8	50*	3.4 J	10 U	47	10 U	45	22	21	15	13	4.4 J
Pyrene		129-00-0	50*	10 U	2 J	10 U	10 U	5.9 J	4.2 J	3.3 J	10 U	10 U	10 U
Total PAH (17)		TPAH17_ND0	NE	29.9	8.59	275.6	ND	184.65	196.56	130.97	48.9	40.1	28

Table 4-16. OU-4. Summary of Expanded Groundwater Analytical Results
 Quarterly Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 National Grid Bay Shore/Brightwaters Former MGP Site
 Bay Shore, NY

Operable Unit Area Aquifer Zone				Former Cesspool Area Intermediate					Former Cesspool Area Intermediate				Deep	Former Pond Area Shallow		
Operable Unit Sample Name	Start Depth	End Depth	Depth Unit	Sample Date	OU4 WCMW-05I2	OU4 WCMW-11I	OU4 WCMW-26I	OU4 WCMW-26I2	OU4 WCMW-29I	OU4 WCMW-30I	OU4 WCMW-30I	OU4 WCMW-30I	OU4 WCMW-30I	OU4 WCMW-11D	OU4 WCMW-14S	OU4 DUP-07
Analyte	Units	CAS no.	NYS AWQS													
BTEX	µg/L															
Benzene		71-43-2	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
Toluene		108-88-3	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
Ethylbenzene		100-41-4	5		1 U	1 U	1 U	1 U	1 U	1 U	0.36 J	1.5 J	1 U	1 U	1 U	1 U
Total Xylene		1330-20-7	5		2 U	2 U	2 U	2 U	2 U	7.6 J	2 U	4.1 J	2 U	2 U	2 U	2 U
Total BTEX		TBTEX_ND0	NE		ND	ND	ND	ND	ND	7.6	0.36	5.6	ND	ND	ND	ND
PAH17	µg/L															
Acenaphthene		83-32-9	20*		10 U	10 U	1.5 J	10 U	3.4 J	34	47	55	10 U	10 U	10 U	10 U
Acenaphthylene		208-96-8	NE		10 U	10 U	10 U	10 U	10 U	3.7 J	6.1 J	4.4 J	10 U	10 U	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	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	10 U	10 U	10 U	1.1 J	1.2 J	10 U	10 U	10 U	10 U	10 U
Fluorene		86-73-7	50*		10 U	10 U	0.98 J	10 U	10 U	23	25	24	10 U	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		10 U	10 U	10 U	10 U	10 U	10 U	10 U	1.6 J	10 U	10 U	10 U	10 U
Naphthalene		91-20-3	10*		2 U	2 U	2 U	2 U	2 U	15	1.2 J	120	2 U	2 U	2 U	2 U
Phenanthrene		85-01-8	50*		10 U	10 U	1.9 J	10 U	10 U	31	43	30	10 U	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)		TPAH17_ND0	NE		ND	ND	4.38	ND	3.4	107.8	123.5	235	ND	ND	ND	ND

Figures

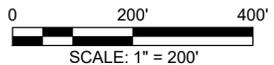


SOURCES:

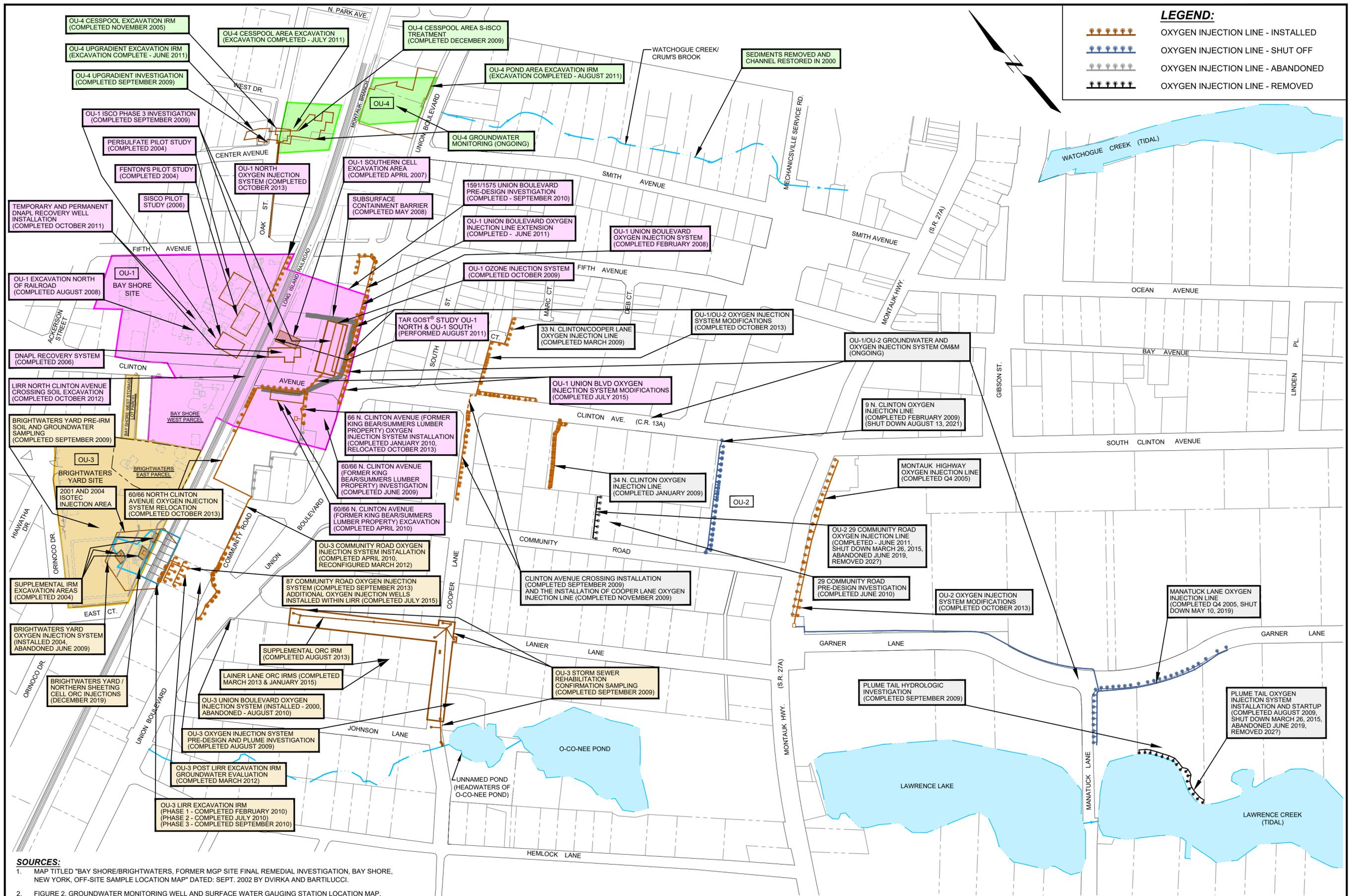
- MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTILUCCI.
- FIGURE 2, GROUNDWATER MONITORING WELL AND SURFACE WATER GAUGING STATION LOCATION MAP, BAY SHORE/BRIGHTWATERS FORMER MGP SITE, SCALE: 1"=200', DATED JANUARY 2004, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
- DRAWING C-1, OFF-SITE SAMPLE LOCATION MAP, BAY SHORE/BRIGHTWATERS FINAL REMEDIAL INVESTIGATION, SCALE: 1"=200', DATED OCTOBER 15, 2003, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
- PROPERTY BOUNDARY LOCATIONS WERE DETERMINED BY OTHERS USING AERIAL PHOTOGRAPHS AND TAX MAPS. PROPERTY BOUNDARIES ARE APPROXIMATE AND MONITORING WELLS LOCATED NEAR OR AT PROPERTY BOUNDARIES DEPICTED ON THE MAP ARE WITHIN THE ROAD RIGHT-OF-WAY.

NOTES:

- WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).
- * INDICATES MONITORING WELL LOCATION SHOWN IS APPROXIMATE.

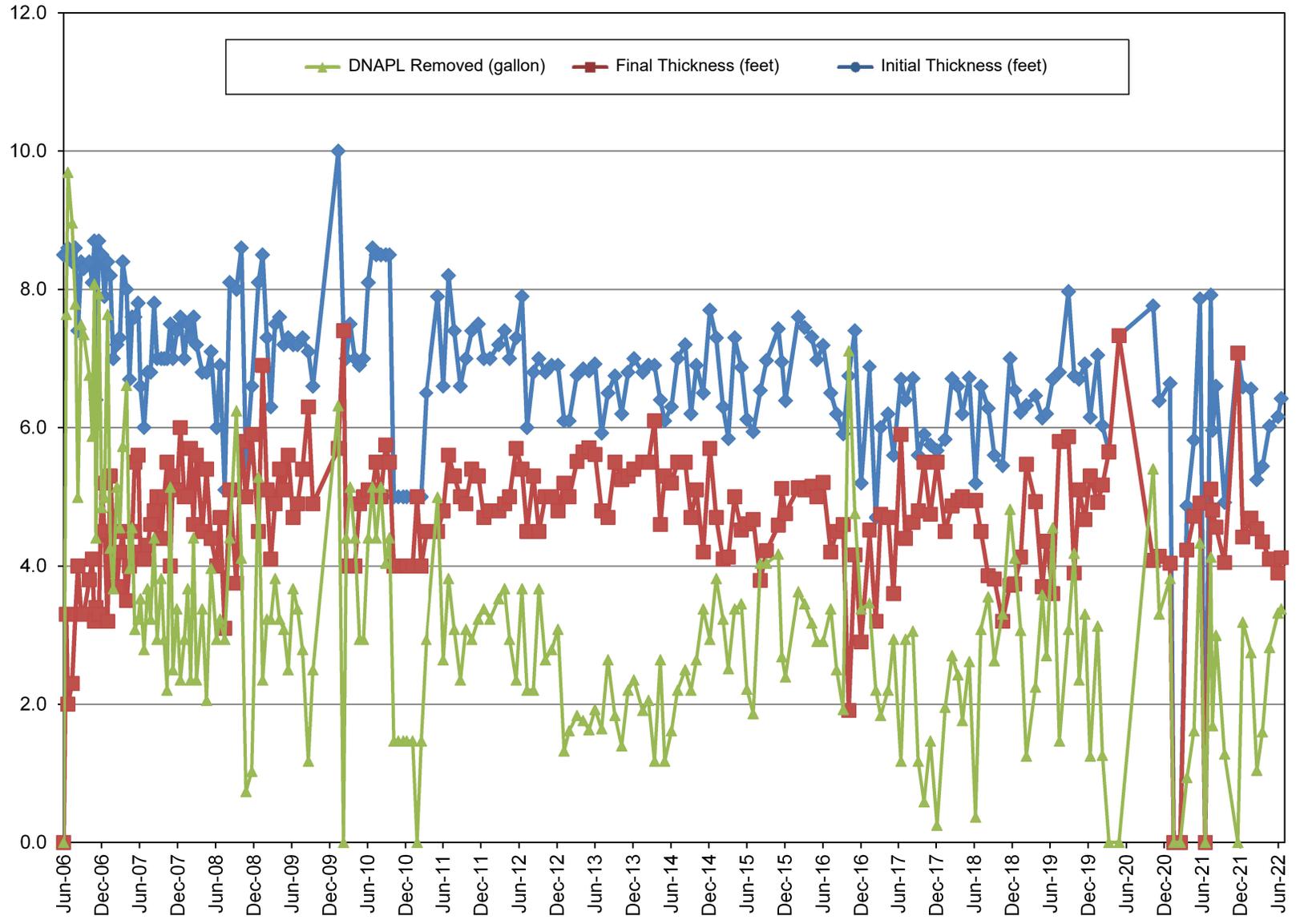


Bay Shore/Brightwaters Former MGP Site Bay Shore, New York 		MONITORING WELL, SOIL VAPOR SAMPLE, AMBIENT AIR SAMPLE, AND SURFACE WATER GAUGING STATION LOCATION MAP
Project 1905774	December 2022	Fig. 1



- SOURCES:**
- MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTILUCCI.
 - FIGURE 2, GROUNDWATER MONITORING WELL AND SURFACE WATER GAUGING STATION LOCATION MAP, BAY SHORE/BRIGHTWATERS FORMER MGP SITE, SCALE: 1"=200', DATED JANUARY 2004, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
 - DRAWING C-1, OFF-SITE SAMPLE LOCATION MAP, BAY SHORE/BRIGHTWATERS FINAL REMEDIAL INVESTIGATION, SCALE: 1"=200', DATED OCTOBER 15, 2003, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
 - PROPERTY BOUNDARY LOCATIONS WERE DETERMINED BY OTHERS USING AERIAL PHOTOGRAPHS AND TAX MAPS. PROPERTY BOUNDARIES ARE APPROXIMATE AND MONITORING WELLS LOCATED NEAR OR AT PROPERTY BOUNDARIES DEPICTED ON THE MAP ARE WITHIN THE ROAD RIGHT-OF-WAY.

Bay Shore/Brightwaters Former MGP Site Bay Shore, New York 		HISTORICAL SITEWIDE PROGRESS MAP
0 200' 400' SCALE: 1" = 200'	Project 1905774	December 2022



NOTE: DNAPL RECOVERY OPERATIONS WERE SUSPENDED IN Q4 2009 DUE TO CONSTRUCTION ACTIVITIES.

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

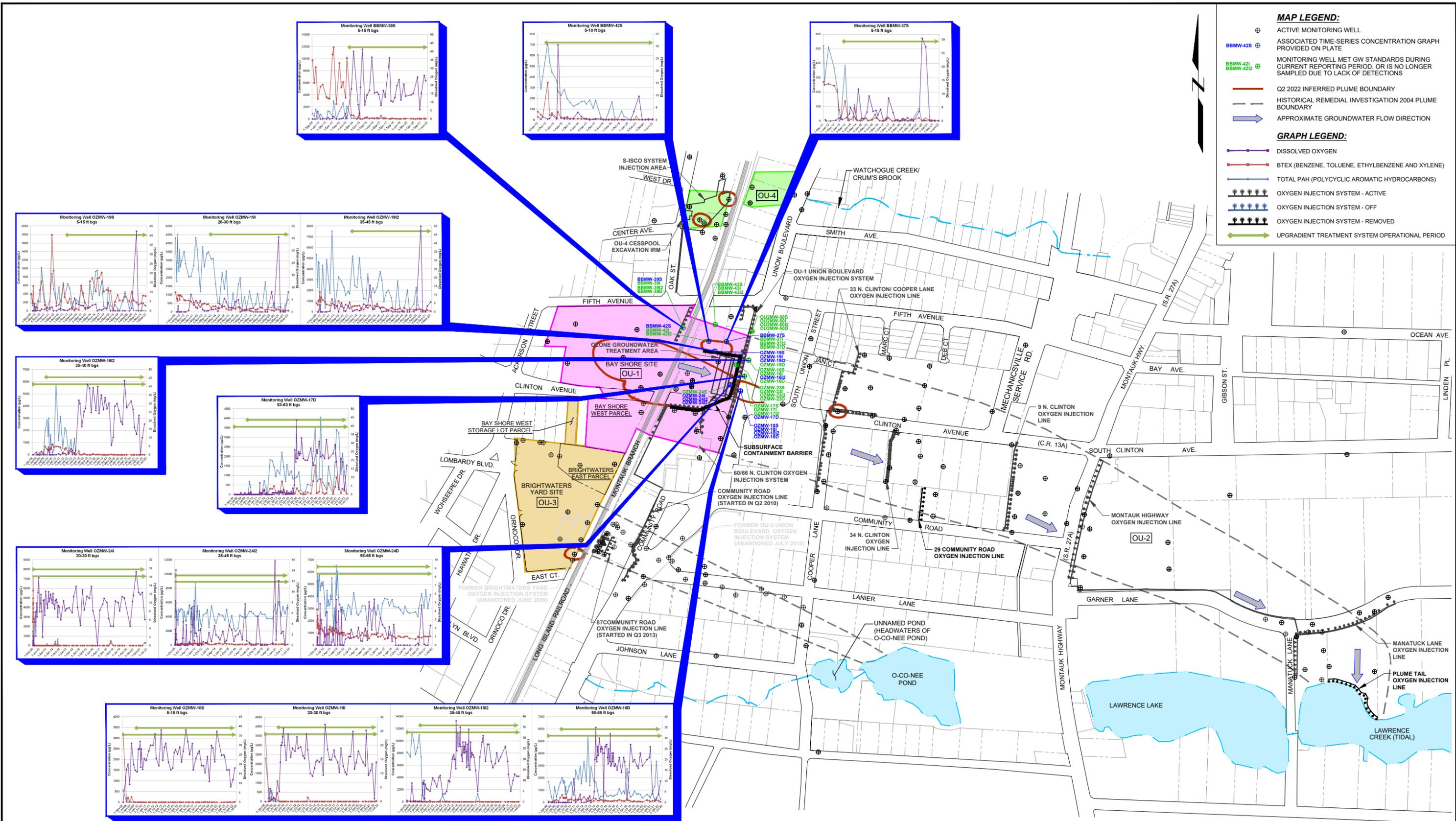


DNAPL RECOVERY DATA
BBRW-02

Project 1905774

December 2022

Fig. 3



- SOURCES:**
1. MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTLUCCI.
 2. FIGURE 2, GROUNDWATER MONITORING WELL AND SURFACE WATER GAUGING STATION LOCATION MAP, BAY SHORE/BRIGHTWATERS FORMER MGP SITE, SCALE: 1"=200', DATED JANUARY 2004, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
 3. DRAWING C-1, OFF-SITE SAMPLE LOCATION MAP, BAY SHORE/BRIGHTWATERS FINAL REMEDIAL INVESTIGATION, SCALE: 1"=200', DATED OCTOBER 15, 2003, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
 4. PROPERTY BOUNDARY LOCATIONS WERE DETERMINED BY OTHERS USING AERIAL PHOTOGRAPHS AND TAX MAPS. PROPERTY BOUNDARIES ARE APPROXIMATE AND MONITORING WELLS LOCATED NEAR OR AT PROPERTY BOUNDARIES DEPICTED ON THE MAP ARE WITHIN THE ROAD RIGHT-OF-WAY.



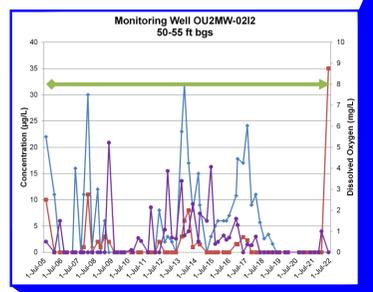
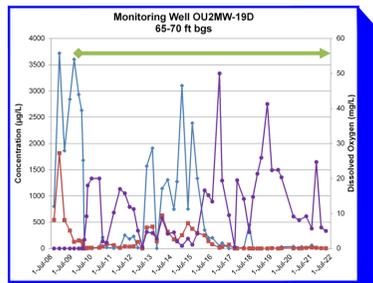
Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

nationalgrid

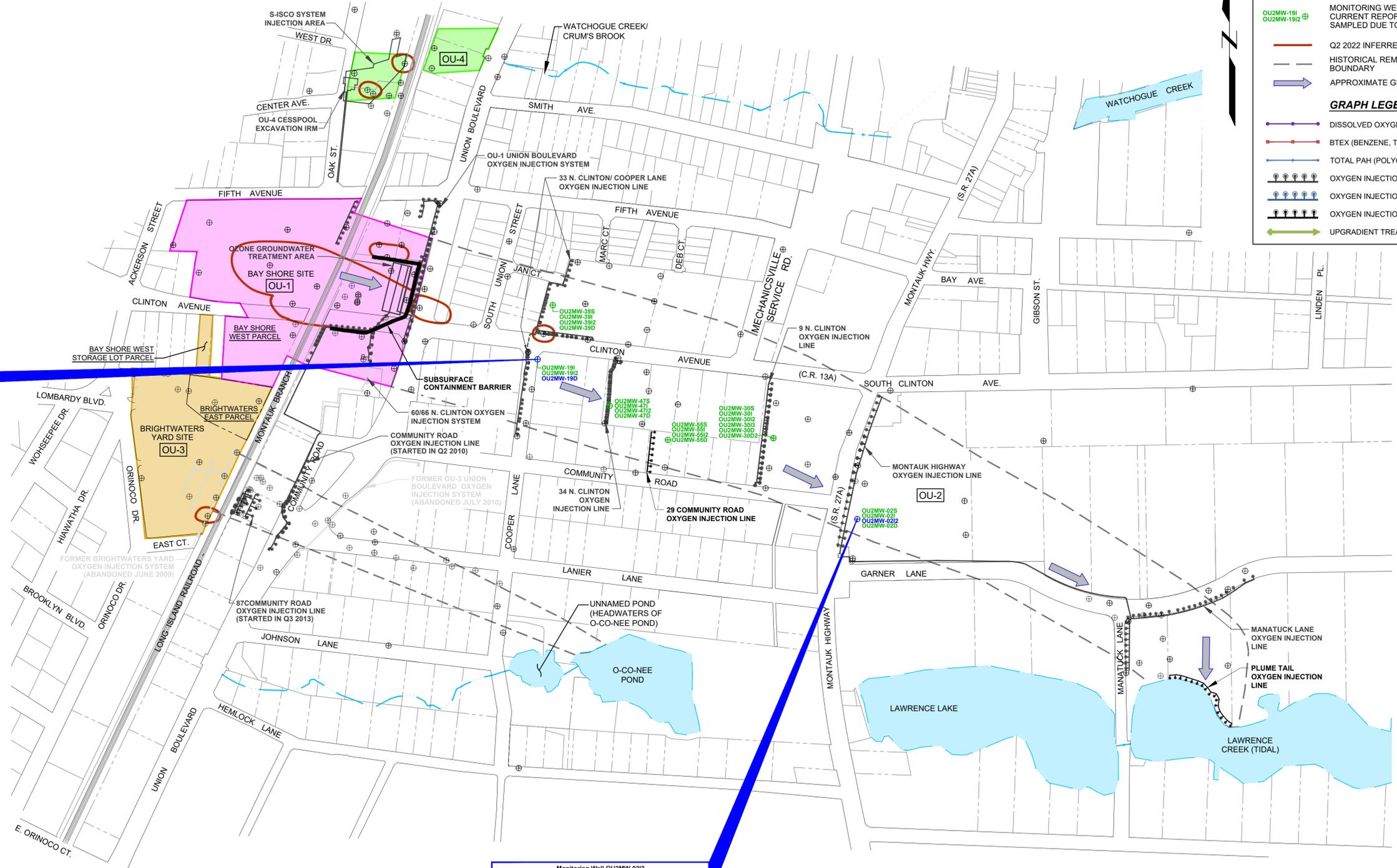


OXYGEN INJECTION LINE
GROUNDWATER DATA
(OU-1)

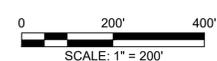
Project 1905774 December 2022 Fig. 4



- MAP LEGEND:**
- ⊕ ACTIVE MONITORING WELL
 - OU2MW-19D ⊕ ASSOCIATED TIME-SERIES CONCENTRATION GRAPH PROVIDED ON PLATE
 - OU2MW-191 ⊕ MONITORING WELL MET GW STANDARDS DURING CURRENT REPORTING PERIOD, OR IS NO LONGER SAMPLED DUE TO LACK OF DETECTIONS
 - Q2 2022 INFERRED PLUME BOUNDARY
 - - - HISTORICAL REMEDIAL INVESTIGATION 2004 PLUME BOUNDARY
 - ➔ APPROXIMATE GROUNDWATER FLOW DIRECTION
- GRAPH LEGEND:**
- DISSOLVED OXYGEN
 - BTX (BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE)
 - TOTAL PAH (POLYCYCLIC AROMATIC HYDROCARBONS)
 - ⊕ OXYGEN INJECTION SYSTEM - ACTIVE
 - ⊖ OXYGEN INJECTION SYSTEM - OFF
 - ⊗ OXYGEN INJECTION SYSTEM - REMOVED
 - ➔ UPGRADIENT TREATMENT SYSTEM OPERATIONAL PERIOD



- SOURCES:**
1. MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTILUCCI.
 2. FIGURE 2, GROUNDWATER MONITORING WELL AND SURFACE WATER GAUGING STATION LOCATION MAP, BAY SHORE/BRIGHTWATERS FORMER MGP SITE, SCALE: 1"=200', DATED JANUARY 2004, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
 3. DRAWING C-1, OFF-SITE SAMPLE LOCATION MAP, BAY SHORE/BRIGHTWATERS FINAL REMEDIAL INVESTIGATION, SCALE: 1"=200', DATED OCTOBER 15, 2003, PREPARED BY VANASSE HANGEN BRUSTLIN, INC., MIDDLETOWN, CONNECTICUT.
 4. PROPERTY BOUNDARY LOCATIONS WERE DETERMINED BY OTHERS USING AERIAL PHOTOGRAPHS AND TAX MAPS. PROPERTY BOUNDARIES ARE APPROXIMATE AND MONITORING WELLS LOCATED NEAR OR AT PROPERTY BOUNDARIES DEPICTED ON THE MAP ARE WITHIN THE ROAD RIGHT-OF-WAY.



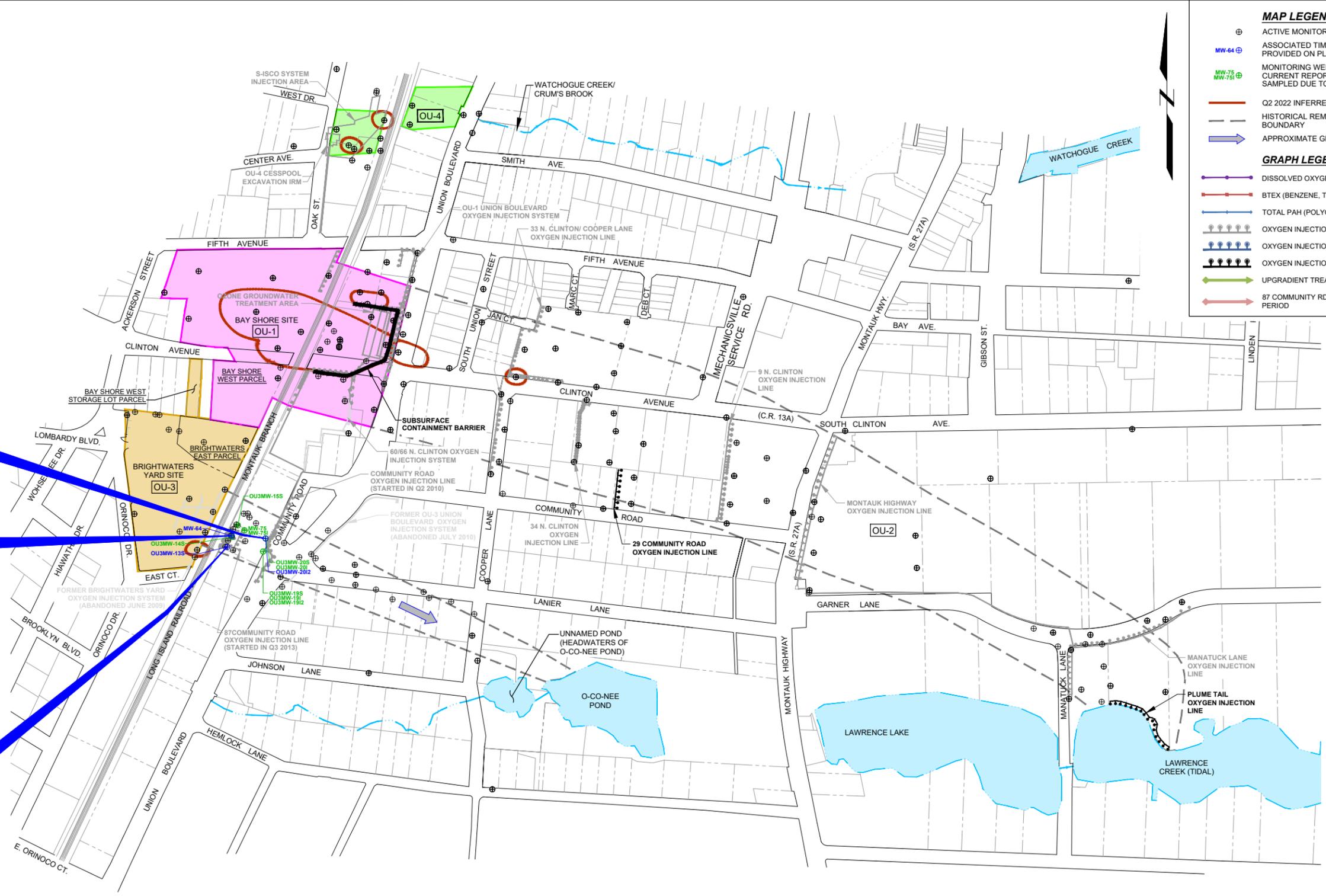
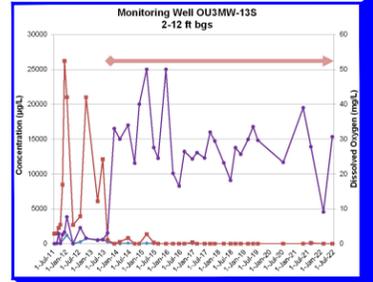
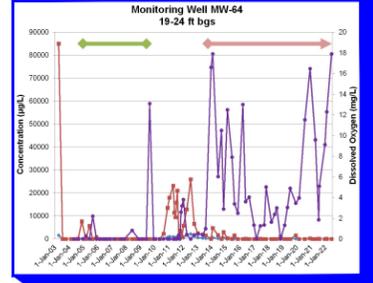
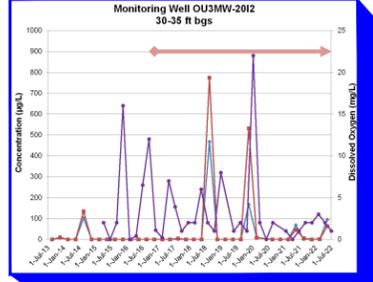
Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

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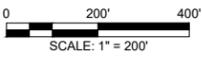
OXYGEN INJECTION LINE
GROUNDWATER DATA
(OU-2)

December 2022



- MAP LEGEND:**
- ⊕ ACTIVE MONITORING WELL
 - MW-64 ⊕ ASSOCIATED TIME-SERIES CONCENTRATION GRAPH PROVIDED ON PLATE
 - MW-75 ⊕ MW-75 ⊕ MONITORING WELL MET GW STANDARDS DURING CURRENT REPORTING PERIOD, OR IS NO LONGER SAMPLED DUE TO LACK OF DETECTIONS
 - Q2 2022 INFERRED PLUME BOUNDARY
 - - - HISTORICAL REMEDIAL INVESTIGATION 2004 PLUME BOUNDARY
 - APPROXIMATE GROUNDWATER FLOW DIRECTION
- GRAPH LEGEND:**
- DISSOLVED OXYGEN
 - BTEX (BENZENE, TOLUENE, ETHYL BENZENE AND XYLENE)
 - TOTAL PAH (POLYCYCLIC AROMATIC HYDROCARBONS)
 - ⊕ OXYGEN INJECTION SYSTEM - ACTIVE
 - ⊖ OXYGEN INJECTION SYSTEM - OFF
 - ⊗ OXYGEN INJECTION SYSTEM - REMOVED
 - UPGRADED TREATMENT SYSTEM OPERATIONAL PERIOD
 - 87 COMMUNITY RD TREATMENT SYSTEM OPERATIONAL PERIOD

- SOURCES:**
1. MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTILUCCI.
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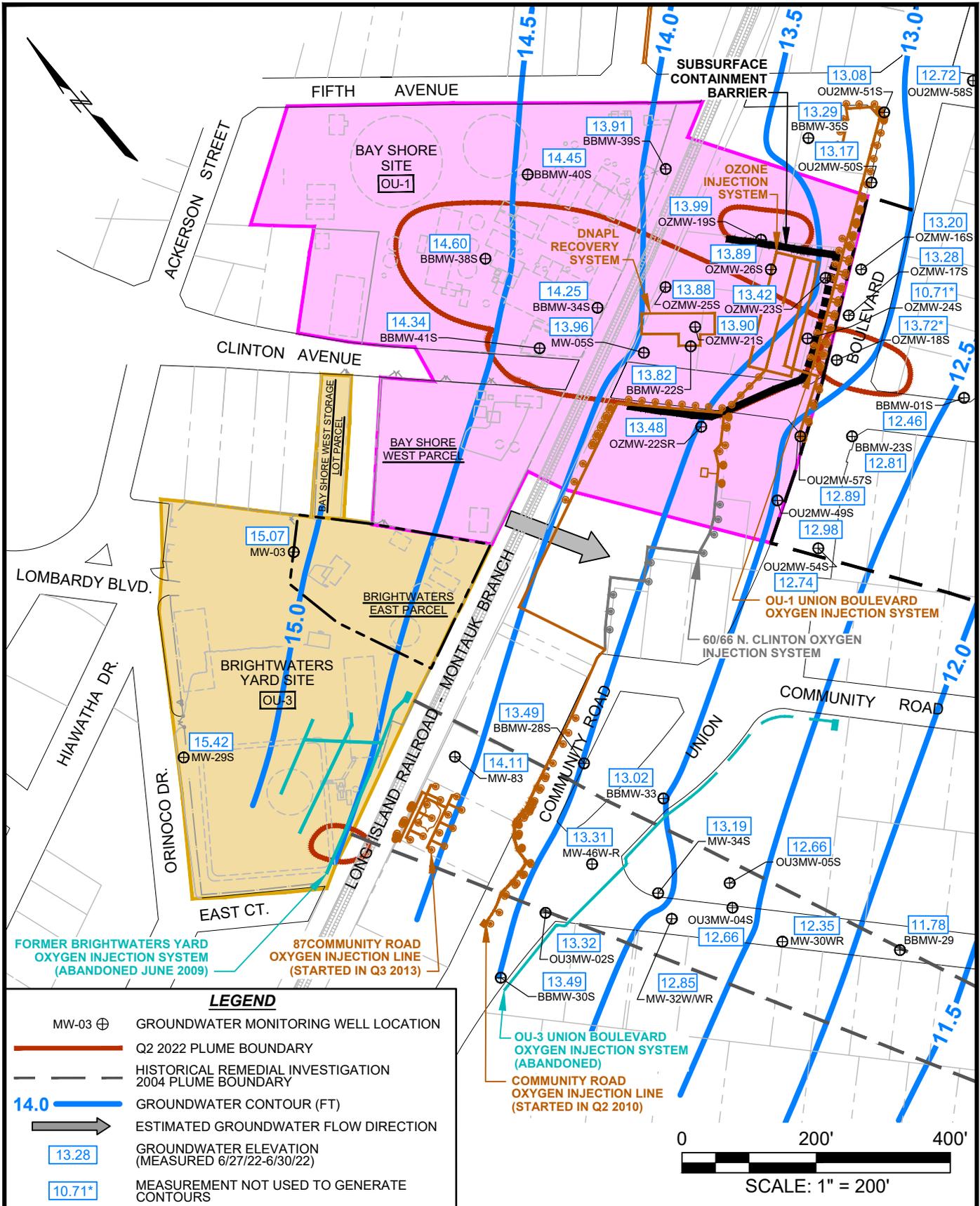
Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

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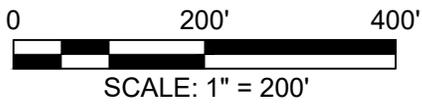
OXYGEN INJECTION LINE
GROUNDWATER DATA
(OU-3)

Project 1905774 December 2022 Fig. 6



LEGEND

- MW-03 ⊕ GROUNDWATER MONITORING WELL LOCATION
- Q2 2022 PLUME BOUNDARY
- - - HISTORICAL REMEDIAL INVESTIGATION 2004 PLUME BOUNDARY
- 14.0 — GROUNDWATER CONTOUR (FT)
- ESTIMATED GROUNDWATER FLOW DIRECTION
- 13.28 GROUNDWATER ELEVATION (MEASURED 6/27/22-6/30/22)
- 10.71* MEASUREMENT NOT USED TO GENERATE CONTOURS



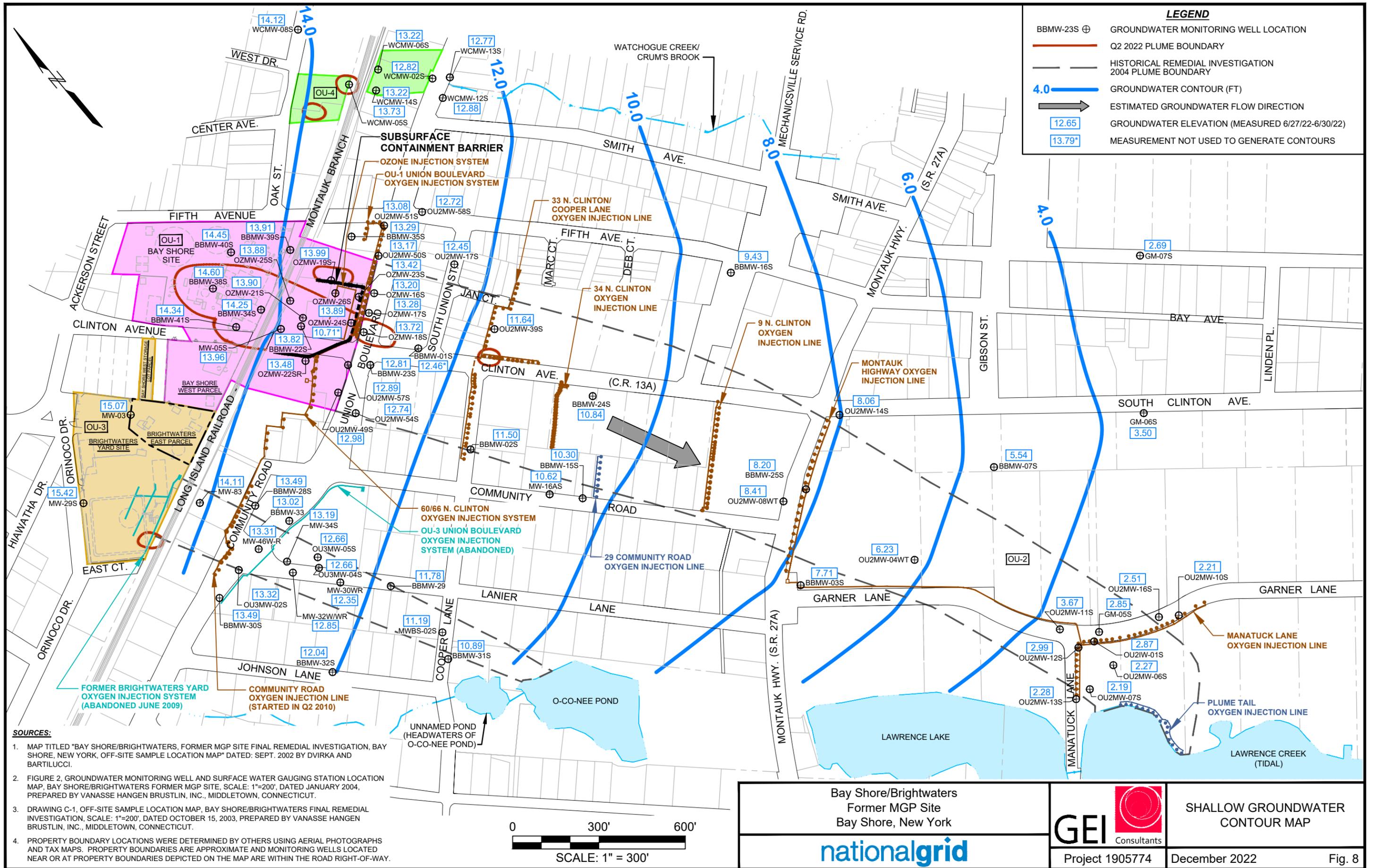
Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

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ON-SITE
SHALLOW GROUNDWATER
CONTOUR MAP

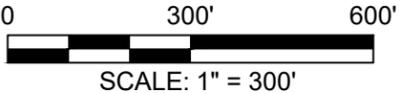
Project 1905774 December 2022 Fig. 7



LEGEND

BMW-23S ⊕	GROUNDWATER MONITORING WELL LOCATION
— (Red)	Q2 2022 PLUME BOUNDARY
— (Black)	HISTORICAL REMEDIAL INVESTIGATION 2004 PLUME BOUNDARY
4.0 — (Blue)	GROUNDWATER CONTOUR (FT)
→ (Grey)	ESTIMATED GROUNDWATER FLOW DIRECTION
12.65	GROUNDWATER ELEVATION (MEASURED 6/27/22-6/30/22)
13.79*	MEASUREMENT NOT USED TO GENERATE CONTOURS

- SOURCES:**
1. MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTILUCCI.
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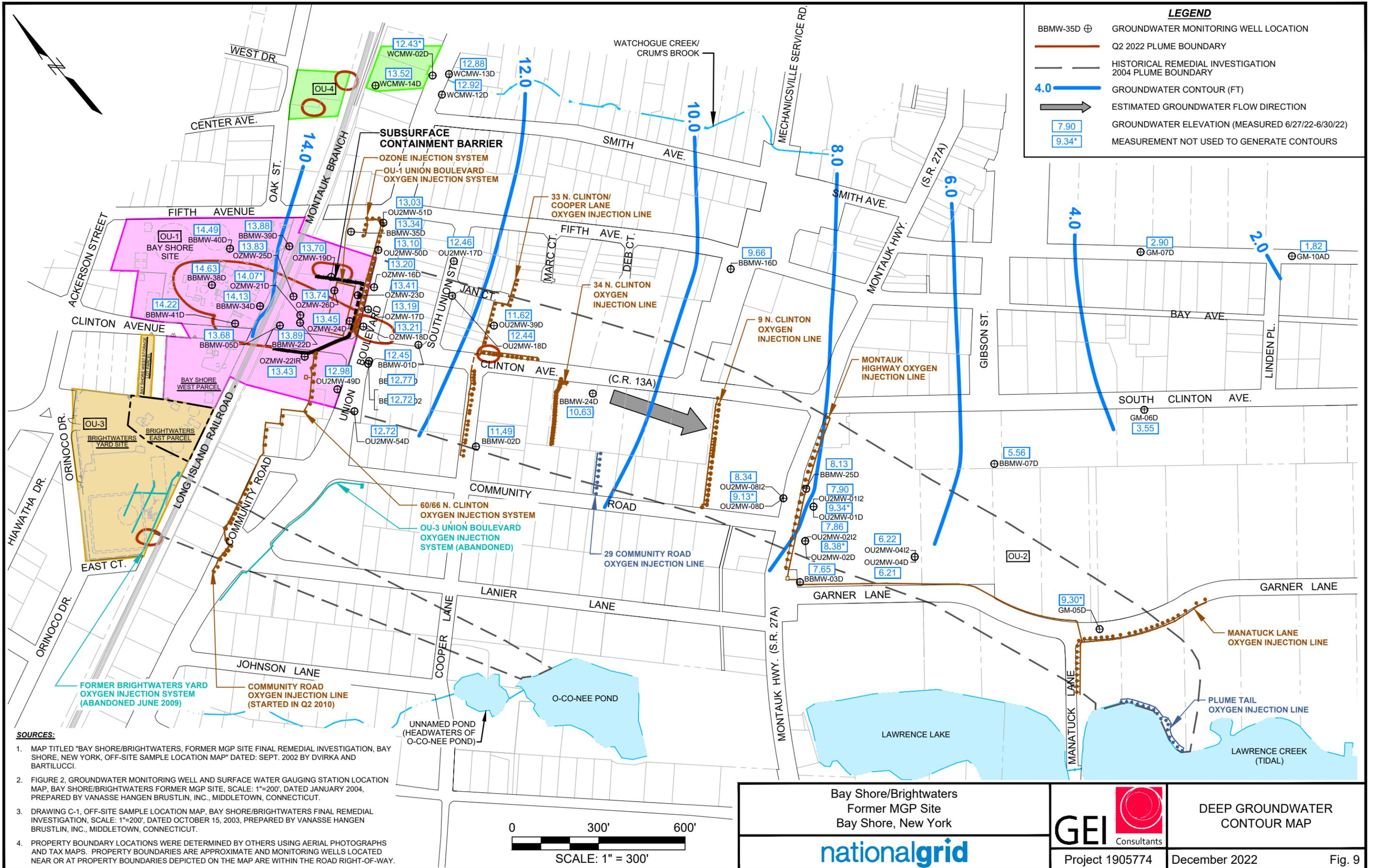
GEI Consultants

Project 1905774

SHALLOW GROUNDWATER
CONTOUR MAP

December 2022

Fig. 8



LEGEND

BMW-35D ⊕	GROUNDWATER MONITORING WELL LOCATION
— (dashed line)	Q2 2022 PLUME BOUNDARY
— (dashed line)	HISTORICAL REMEDIAL INVESTIGATION 2004 PLUME BOUNDARY
4.0 — (blue line)	GROUNDWATER CONTOUR (FT)
→ (grey arrow)	ESTIMATED GROUNDWATER FLOW DIRECTION
7.90	GROUNDWATER ELEVATION (MEASURED 6/27/22-6/30/22)
9.34*	MEASUREMENT NOT USED TO GENERATE CONTOURS

- SOURCES:**
1. MAP TITLED "BAY SHORE/BRIGHTWATERS, FORMER MGP SITE FINAL REMEDIAL INVESTIGATION, BAY SHORE, NEW YORK, OFF-SITE SAMPLE LOCATION MAP" DATED: SEPT. 2002 BY DVIRKA AND BARTILUCCI.
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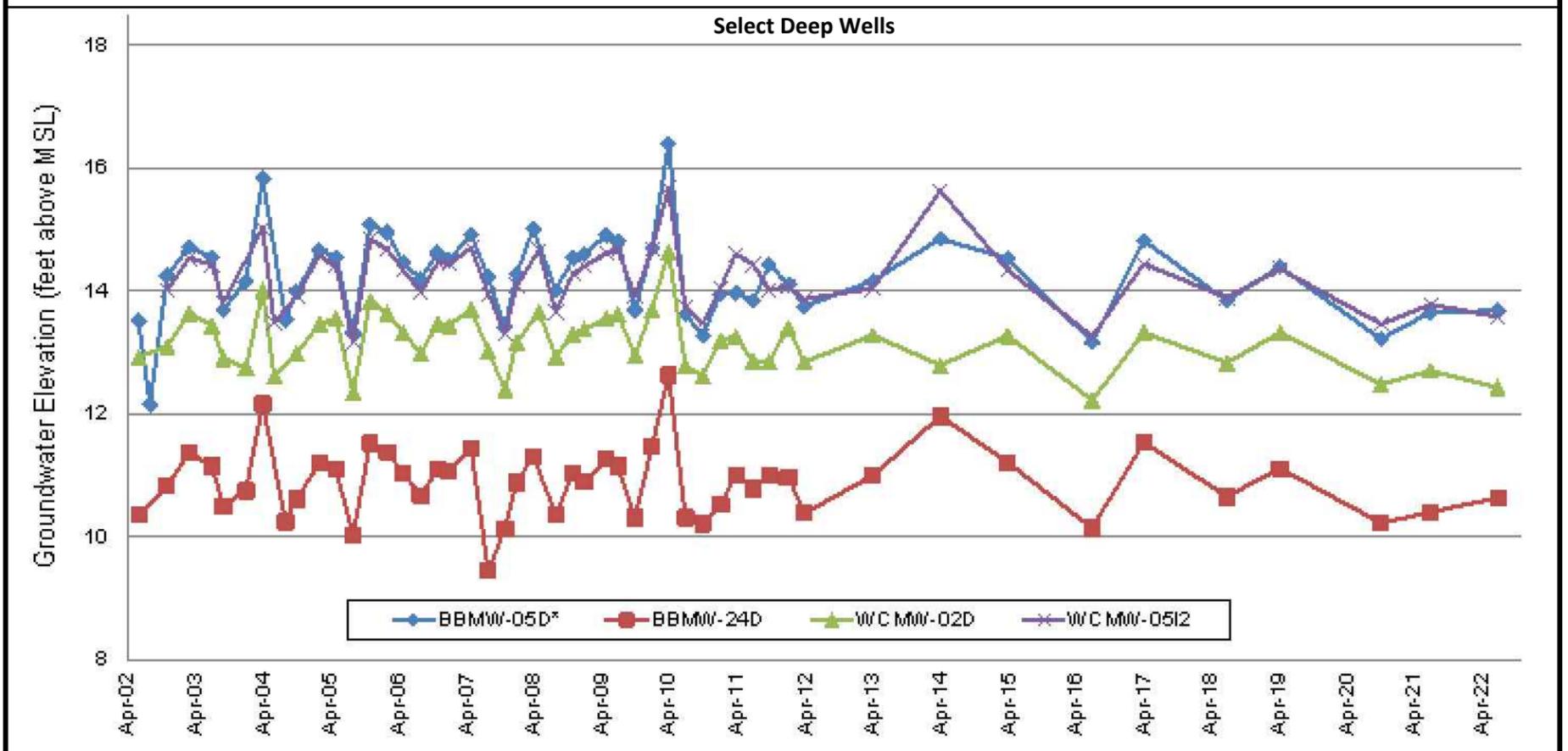
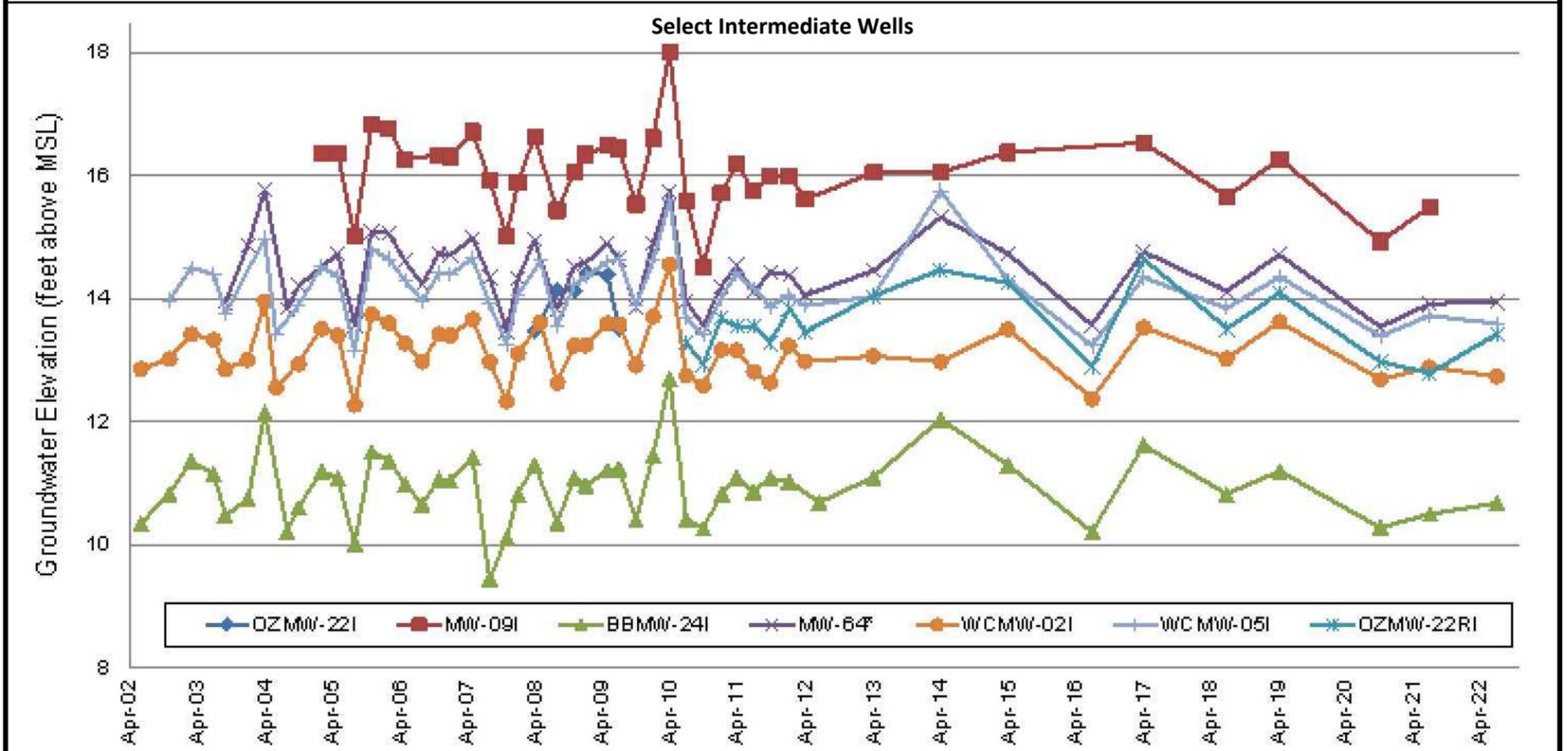
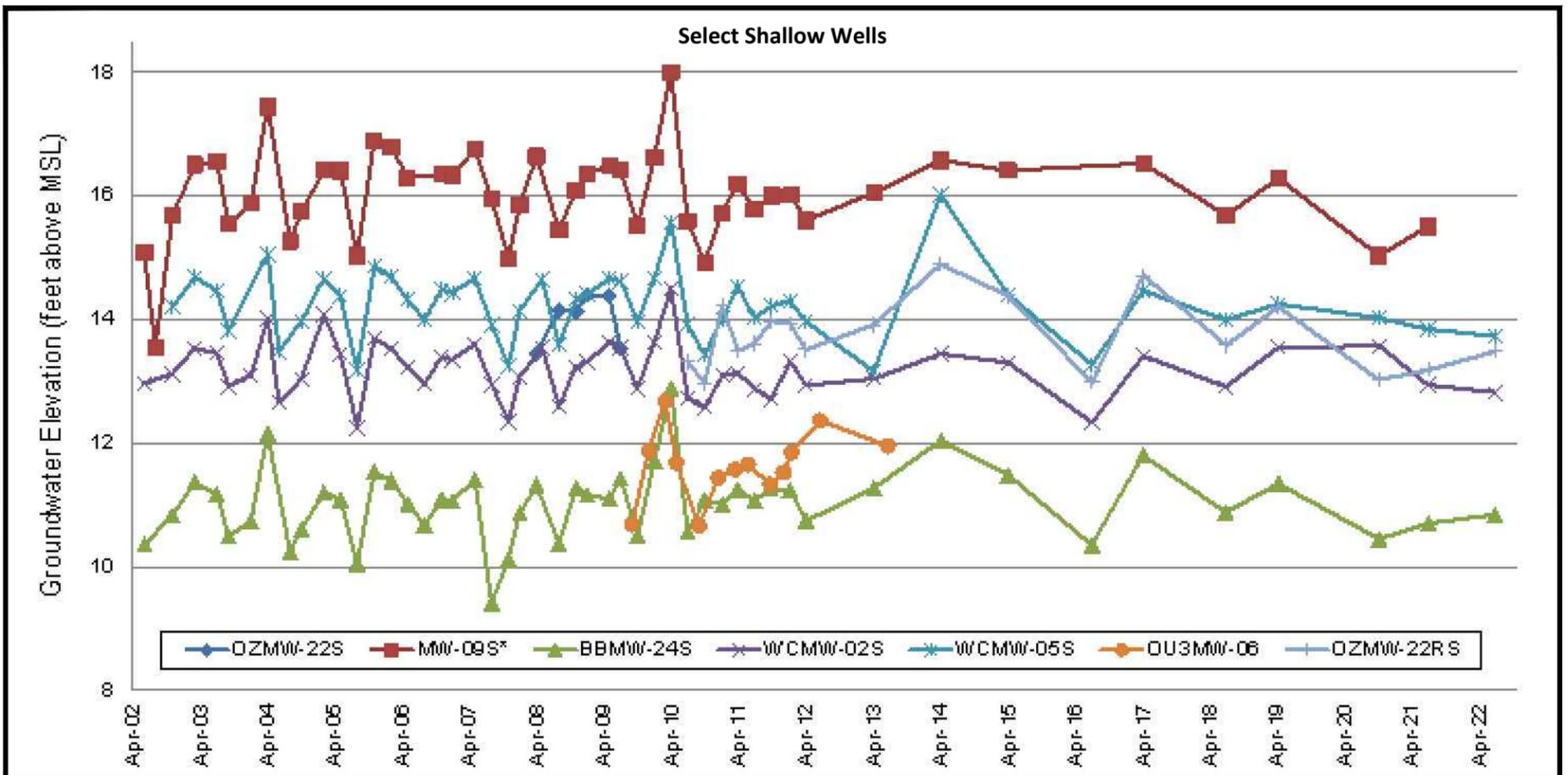
Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

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DEEP GROUNDWATER
CONTOUR MAP

Project 1905774 December 2022 Fig. 9



NOTES:
 1. *DATA PRIOR TO JANUARY 2002 NOT SHOWN.
 2. MSL = MEAN SEA LEVEL

Bay Shore/Brightwaters
 Former MGP Site
 Bay Shore, New York



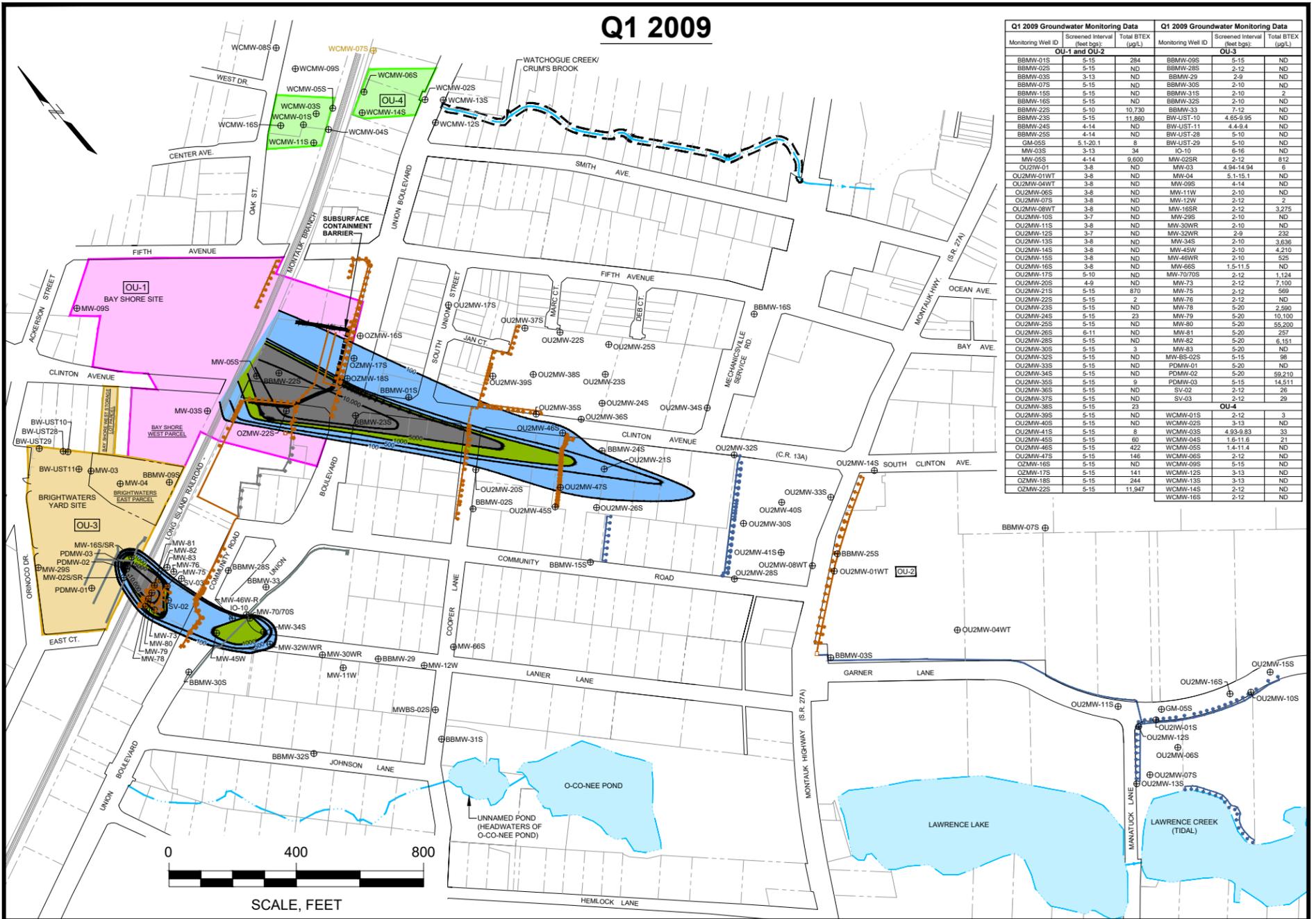
HYDROGRAPHS OF SELECT WELLS

Project 1905774

December 2022

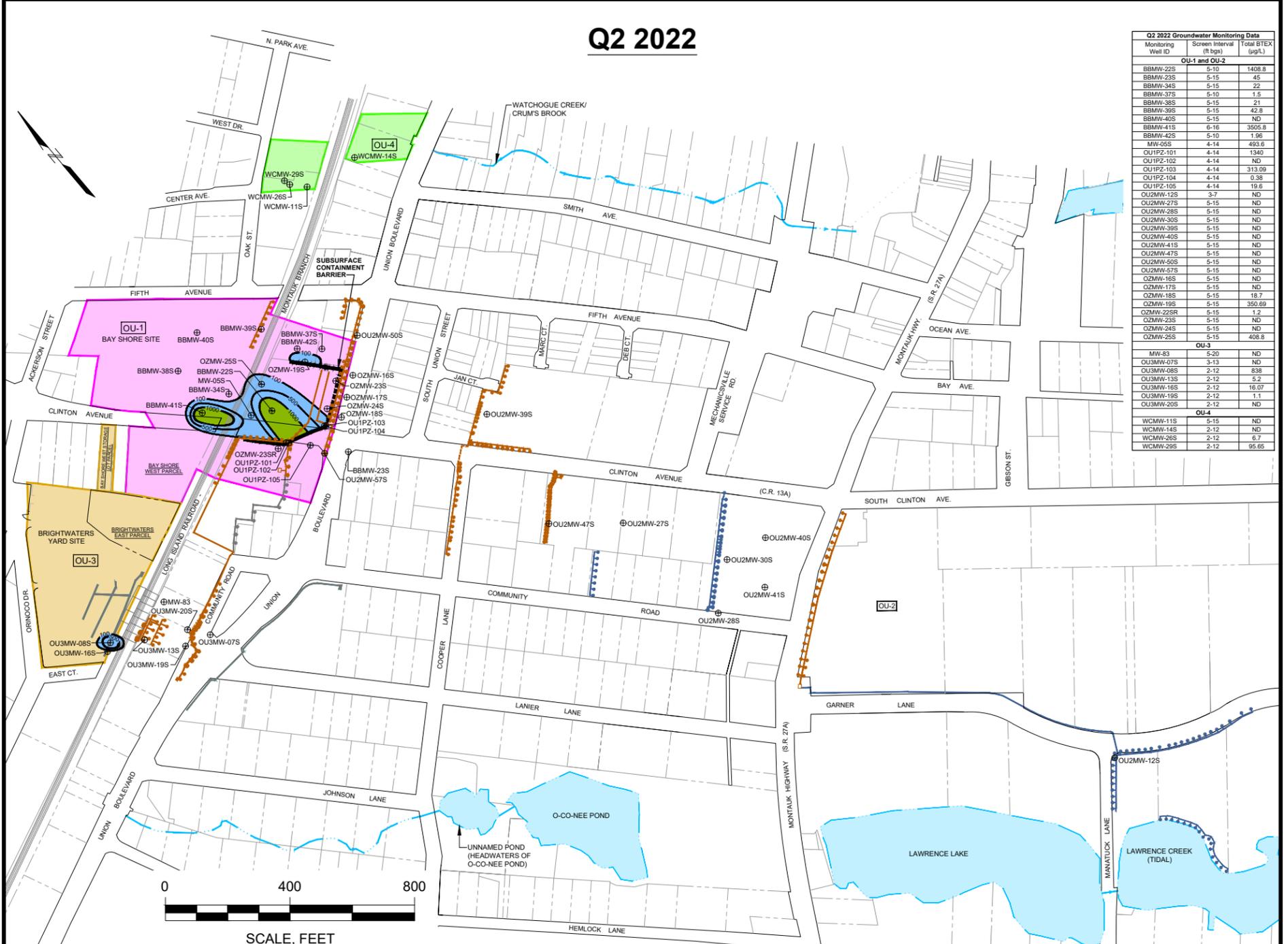
Fig. 10

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (feet bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (feet bgs)	Total BTEX (µg/L)
OU-1 and OU-2					
BBMW-01S	5-15	284	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-16S	5-15	ND	BBMW-31S	2-10	2
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	10,730	BBMW-33	2-12	27
BBMW-23S	5-15	11,860	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
CM-05S	5.1-20.1	8	BW-UST-29	5-10	ND
MW-03S	3-13	34	IO-10	6-16	ND
MW-05S	4-14	9,600	MW-02SR	2-12	812
OU2MW-01T	3-8	ND	MW-03	4.94-14.94	6
OU2MW-01WT	3-8	ND	MW-04	5.1-15.1	ND
OU2MW-04WT	3-8	ND	MW-09S	4-14	ND
OU2MW-06S	3-8	ND	MW-11W	2-10	ND
OU2MW-07S	3-8	ND	MW-12W	2-12	2
OU2MW-08WT	3-8	ND	MW-16SR	2-12	3,275
OU2MW-10S	3-7	ND	MW-29S	2-10	ND
OU2MW-11S	3-8	ND	MW-30WR	2-10	ND
OU2MW-12S	3-7	ND	MW-32WR	2-9	232
OU2MW-13S	3-8	ND	MW-34S	2-10	3,038
OU2MW-14S	3-8	ND	MW-45W	2-10	4,210
OU2MW-15S	3-8	ND	MW-46WR	2-10	525
OU2MW-16S	3-8	ND	MW-66S	1.5-11.5	ND
OU2MW-17S	5-10	ND	MW-70/70S	2-12	1,124
OU2MW-20S	4-9	ND	MW-73	2-12	7,100
OU2MW-21S	5-15	870	MW-75	2-12	569
OU2MW-22S	5-15	2	MW-78	2-12	ND
OU2MW-23S	5-15	ND	MW-78	5-20	2,590
OU2MW-24S	5-15	23	MW-79	5-20	10,100
OU2MW-25S	5-15	ND	MW-80	5-20	55,200
OU2MW-26S	6-11	ND	MW-81	5-20	ND
OU2MW-28S	5-15	ND	MW-82	5-20	6,151
OU2MW-30S	5-15	3	MW-83	5-20	ND
OU2MW-32S	5-15	ND	MW-8S-02S	5-15	98
OU2MW-33S	5-15	ND	PDMW-01	5-20	ND
OU2MW-34S	5-15	ND	PDMW-02	5-20	59,210
OU2MW-35S	5-15	9	PDMW-03	5-15	14,511
OU2MW-36S	5-15	ND	SV-02	2-12	26
OU2MW-37S	5-15	ND	SV-03	2-12	29
OU2MW-38S	5-15	23	OU-4		
OU2MW-39S	5-15	ND	WCMW-01S	2-12	3
OU2MW-40S	5-15	ND	WCMW-02S	2-13	ND
OU2MW-41S	5-15	8	WCMW-03S	4.92-9.83	33
OU2MW-45S	5-15	60	WCMW-04S	1.6-11.6	21
OU2MW-46S	5-15	422	WCMW-05S	1.4-11.4	ND
OU2MW-47S	5-15	146	WCMW-06S	2-12	ND
OZMW-16S	5-15	ND	WCMW-07S	5-15	ND
OZMW-17S	5-15	141	WCMW-12S	3-13	ND
OZMW-18S	5-15	244	WCMW-13S	3-13	ND
OZMW-22S	5-15	11,947	WCMW-14S	2-12	ND
			WCMW-16S	2-12	ND

Q2 2022



Q2 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	1408.8
BBMW-23S	5-15	45
BBMW-34S	5-15	22
BBMW-37S	5-10	1.5
BBMW-38S	5-15	21
BBMW-39S	5-15	42.8
BBMW-40S	5-15	ND
BBMW-41S	6-16	3505.8
BBMW-42S	5-10	1.96
MW-05S	4-14	493.8
OU1PZ-101	4-14	1340
OU1PZ-102	4-14	ND
OU1PZ-103	4-14	313.09
OU1PZ-104	4-14	0.38
OU1PZ-105	4-14	ND
OU2MW-12S	3-7	ND
OU2MW-27S	5-15	ND
OU2MW-28S	5-15	ND
OU2MW-30S	5-15	ND
OU2MW-39S	5-15	ND
OU2MW-40S	5-15	ND
OU2MW-41S	5-15	ND
OU2MW-47S	5-15	ND
OU2MW-50S	5-15	ND
OU2MW-57S	5-15	ND
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	18.7
OZMW-19S	5-15	350.69
OZMW-22SR	5-15	1.2
OZMW-23S	5-15	ND
OZMW-24S	5-15	ND
OZMW-25S	5-15	408.8
OU-3		
MW-83	5-20	ND
OU3MW-07S	3-12	ND
OU3MW-06S	2-12	838
OU3MW-13S	2-12	5.2
OU3MW-16S	2-12	16.07
OU3MW-19S	2-12	1.1
OU3MW-20S	2-12	ND
OU-4		
WCMW-11S	5-15	ND
WCMW-14S	2-12	ND
WCMW-26S	2-12	6.7
WCMW-29S	2-12	96.66

LEGEND:

- ⊕ BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L MICROGRAMS PER LITER
- BTEX BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- BTEX ≥ 100 µg/L
- BTEX ≥ 1,000 µg/L
- BTEX ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- - - OXYGEN INJECTION LINE - SHUT OFF
- - - OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

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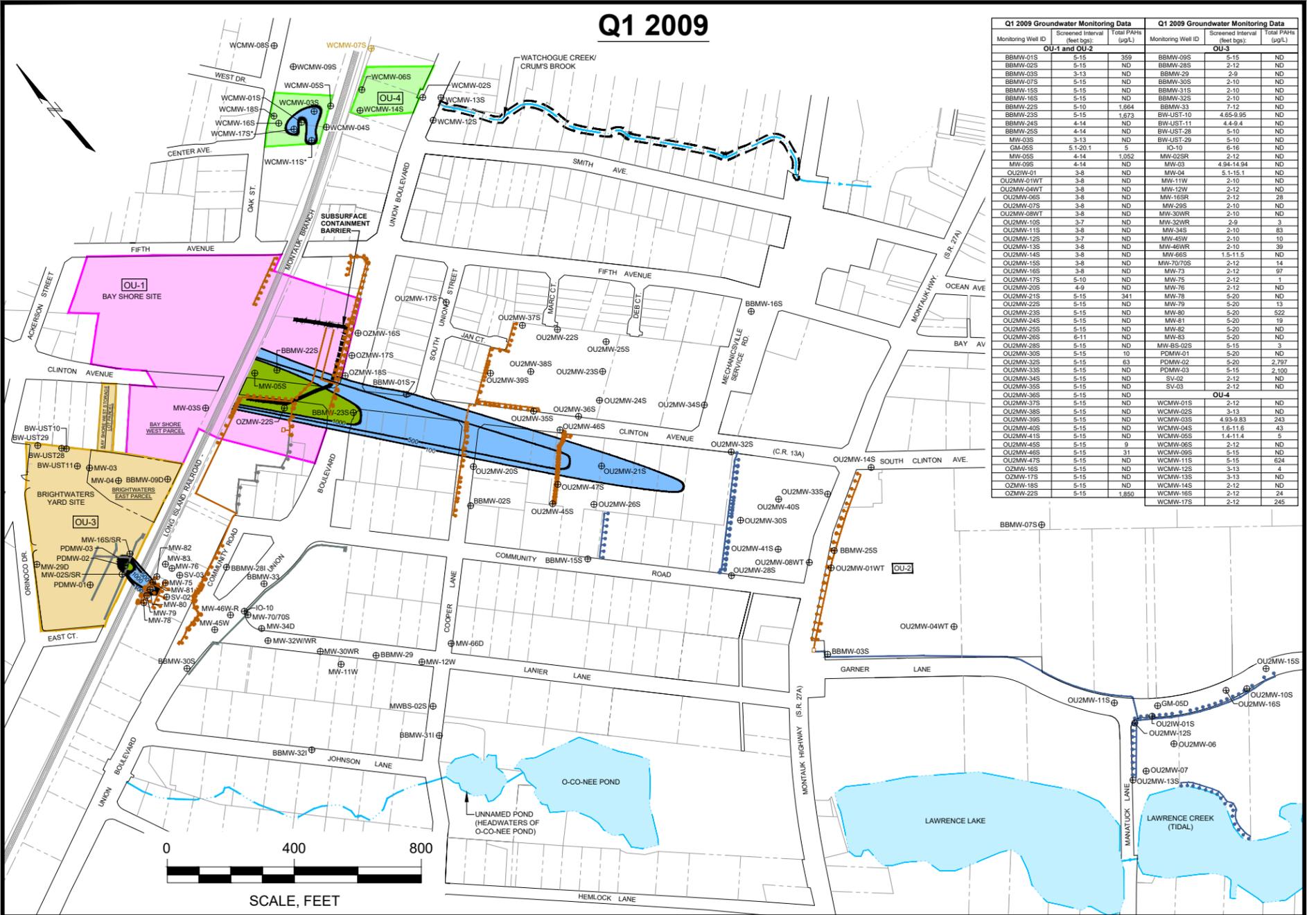
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**WATER TABLE GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(0-10 FEET BGS)**

December 2022

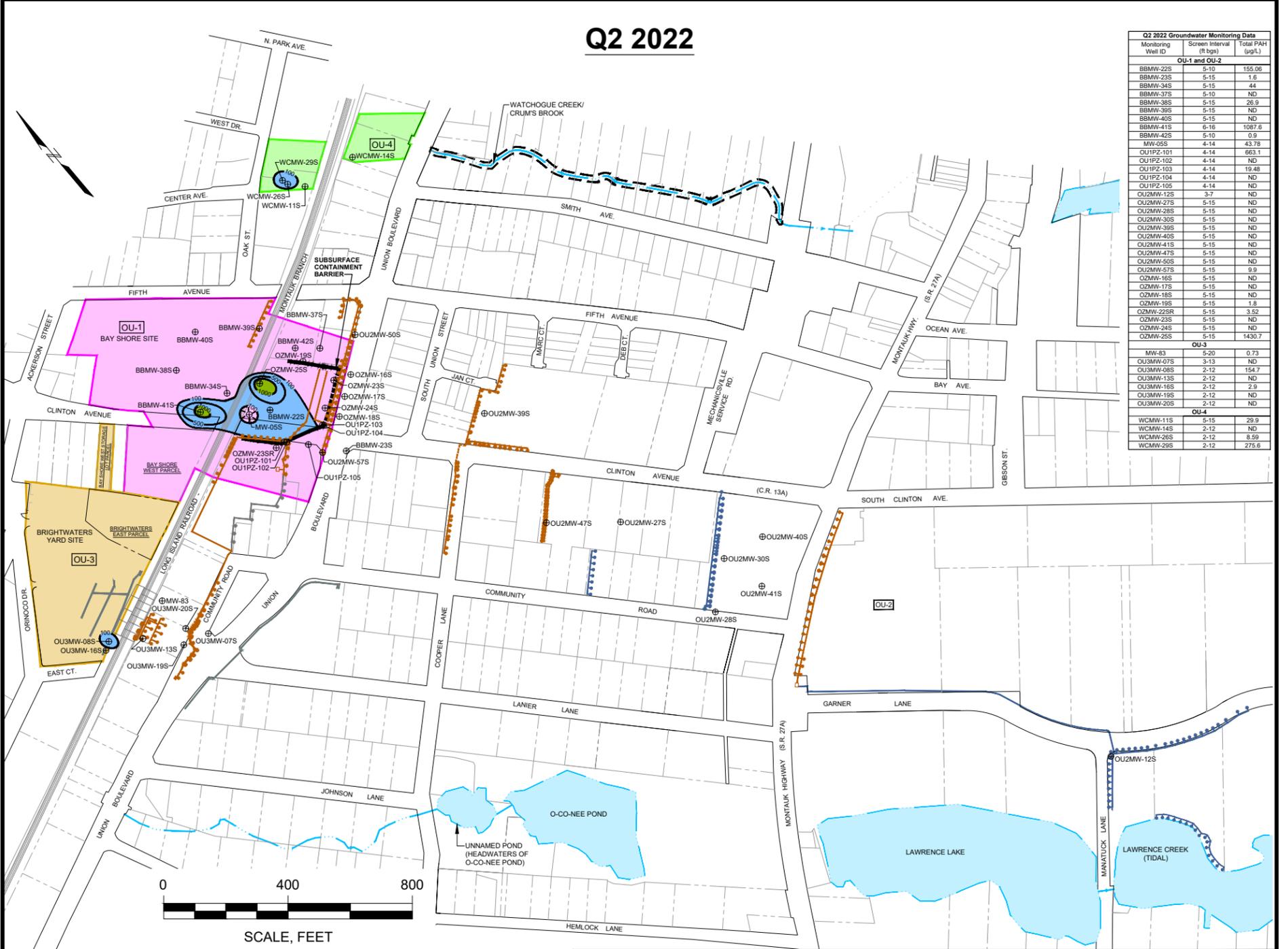
Fig. 11

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2					
BBMW-01S	5-15	359	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-15S	5-15	ND	BBMW-31S	2-10	ND
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	1,664	BBMW-33	7-12	ND
BBMW-23S	5-15	1,673	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
MW-03S	3-13	ND	BW-UST-29	5-10	ND
GM-05S	5.1-20.1	5	IO-10	6-16	ND
MW-05S	4-14	1,052	MW-02SR	2-12	ND
MW-06S	4-14	ND	MW-03	4.94-14.94	ND
OU2MW-01	3-8	ND	MW-04	5.1-15.1	ND
OU2MW-01WT	3-8	ND	MW-11W	2-10	ND
OU2MW-04WT	3-8	ND	MW-12W	2-12	ND
OU2MW-05S	3-8	ND	MW-15SR	2-12	28
OU2MW-07S	3-8	ND	MW-29S	2-10	ND
OU2MW-08WT	3-8	ND	MW-30WR	2-10	ND
OU2MW-10S	3-7	ND	MW-32WR	2-9	3
OU2MW-11S	3-8	ND	MW-34S	2-10	83
OU2MW-12S	3-7	ND	MW-45W	2-10	10
OU2MW-13S	3-8	ND	MW-46WR	2-10	39
OU2MW-14S	3-8	ND	MW-66S	1.5-11.5	ND
OU2MW-15S	3-8	ND	MW-70/70S	2-12	14
OU2MW-16S	3-8	ND	MW-73	2-12	97
OU2MW-17S	5-10	ND	MW-75	2-12	1
OU2MW-20S	4-9	ND	MW-76	2-12	ND
OU2MW-21S	5-15	341	MW-78	5-20	ND
OU2MW-22S	5-15	ND	MW-79	5-20	13
OU2MW-23S	5-15	ND	MW-80	5-20	522
OU2MW-24S	5-15	ND	MW-81	5-20	19
OU2MW-25S	5-15	ND	MW-82	5-20	ND
OU2MW-26S	6-11	ND	MW-83	5-20	ND
OU2MW-28S	5-15	ND	MW-BS-02S	5-15	3
OU2MW-30S	5-15	10	PDMW-01	5-20	ND
OU2MW-32S	5-15	63	PDMW-02	5-20	2,797
OU2MW-33S	5-15	ND	PDMW-03	5-15	2,100
OU2MW-34S	5-15	ND	SV-02	2-12	ND
OU2MW-35S	5-15	ND	SV-03	2-12	ND
OU2MW-36S	5-15	ND	OU-4		
OU2MW-37S	5-15	ND	WCMW-01S	2-12	ND
OU2MW-38S	5-15	ND	WCMW-02S	3-13	ND
OU2MW-39S	5-15	ND	WCMW-03S	4.93-9.93	243
OU2MW-40S	5-15	ND	WCMW-04S	1.5-11.5	43
OU2MW-41S	5-15	ND	WCMW-05S	1.4-11.4	5
OU2MW-45S	5-15	9	WCMW-06S	2-12	ND
OU2MW-46S	5-15	31	WCMW-07S	5-15	52
OU2MW-47S	5-15	ND	WCMW-11S	5-15	824
OZMW-16S	5-15	ND	WCMW-12S	3-13	4
OZMW-17S	5-15	ND	WCMW-13S	3-13	ND
OZMW-18S	5-15	ND	WCMW-14S	2-12	ND
OZMW-22S	5-15	1,850	WCMW-16S	2-12	24
			WCMW-17S	2-12	245

Q2 2022



Q2 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	165.98
BBMW-23S	5-15	1.6
BBMW-34S	5-15	44
BBMW-37S	5-10	ND
BBMW-38S	5-15	26.9
BBMW-39S	5-15	ND
BBMW-40S	5-15	ND
BBMW-41S	6-16	1087.0
BBMW-42S	5-10	0.9
MW-35S	4-14	43.78
OUIPZ-101	4-14	663.1
OUIPZ-102	4-14	ND
OUIPZ-103	4-14	19.48
OUIPZ-104	4-14	ND
OUIPZ-105	4-14	ND
OU2MW-12S	3-7	ND
OU2MW-27S	5-15	ND
OU2MW-28S	5-15	ND
OU2MW-30S	5-15	ND
OU2MW-39S	5-15	ND
OU2MW-40S	5-15	ND
OU2MW-41S	5-15	ND
OU2MW-47S	5-15	ND
OU2MW-50S	5-15	ND
OU2MW-57S	5-15	9.9
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	ND
OZMW-19S	5-15	ND
OZMW-22SR	5-15	3.52
OZMW-25S	5-15	ND
OZMW-24S	5-15	ND
OZMW-25S	5-15	1430.7
OU-3		
MW-83	5-20	0.73
OU3MW-07S	3-13	ND
OU3MW-08S	2-12	154.7
OU3MW-13S	2-12	ND
OU3MW-16S	2-12	2.9
OU3MW-19S	2-12	ND
OU3MW-20S	2-12	ND
OU-4		
WCMW-11S	6-15	29.9
WCMW-14S	2-12	ND
WCMW-25S	2-12	2.59
WCMW-29S	2-12	275.6

LEGEND:

- EXISTING MONITORING WELL CLUSTER LOCATION
- MICROGRAMS PER LITER
- POLYCYCLIC AROMATIC HYDROCARBONS
- TOTAL PAH >= 100 µg/L
- TOTAL PAH >= 1,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

NOTE:
WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

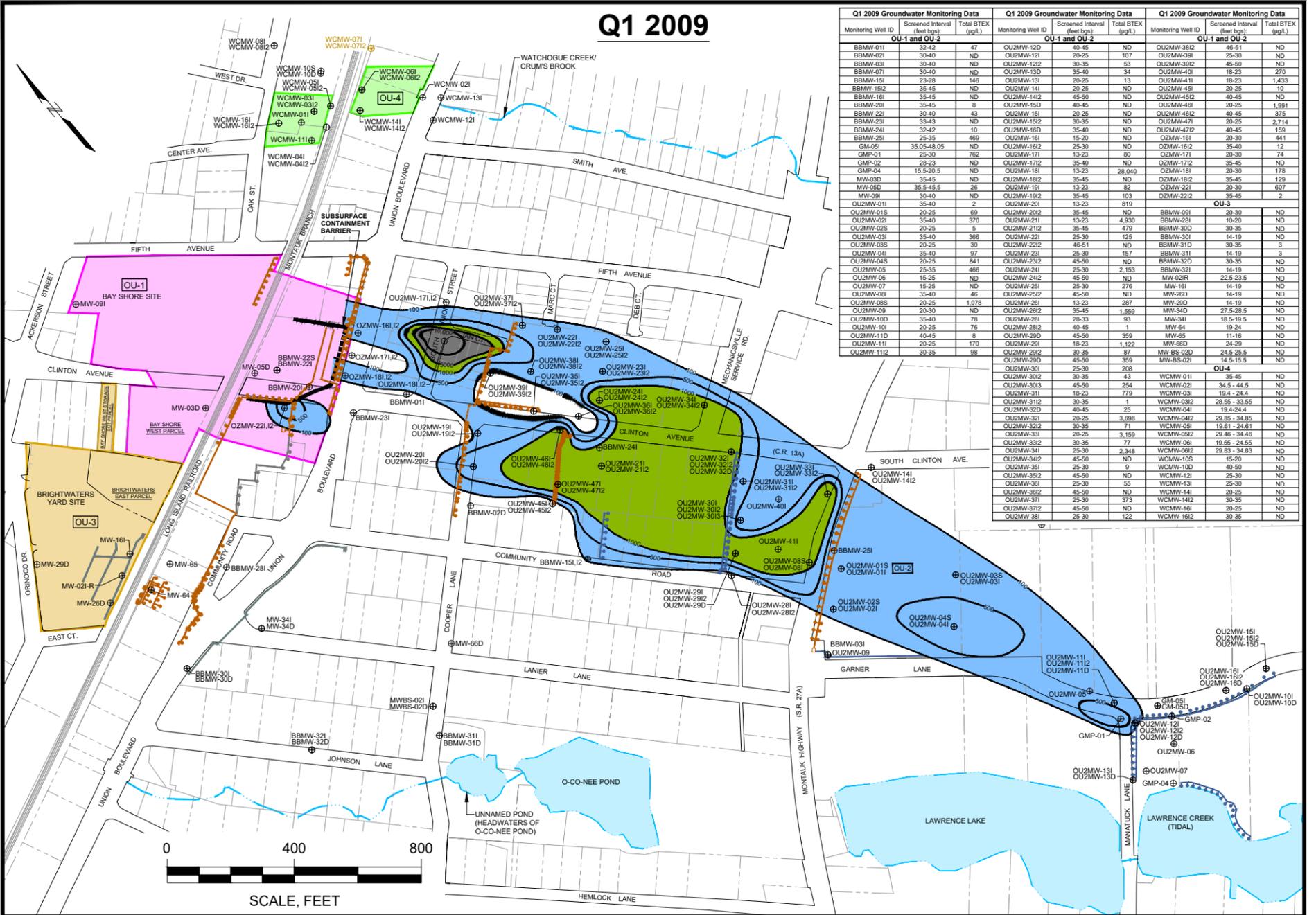
Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

Project 1905774

**WATER TABLE GROUNDWATER
TOTAL PAH
ISO-CONCENTRATION MAPS
(0-10 FEET BGS)**

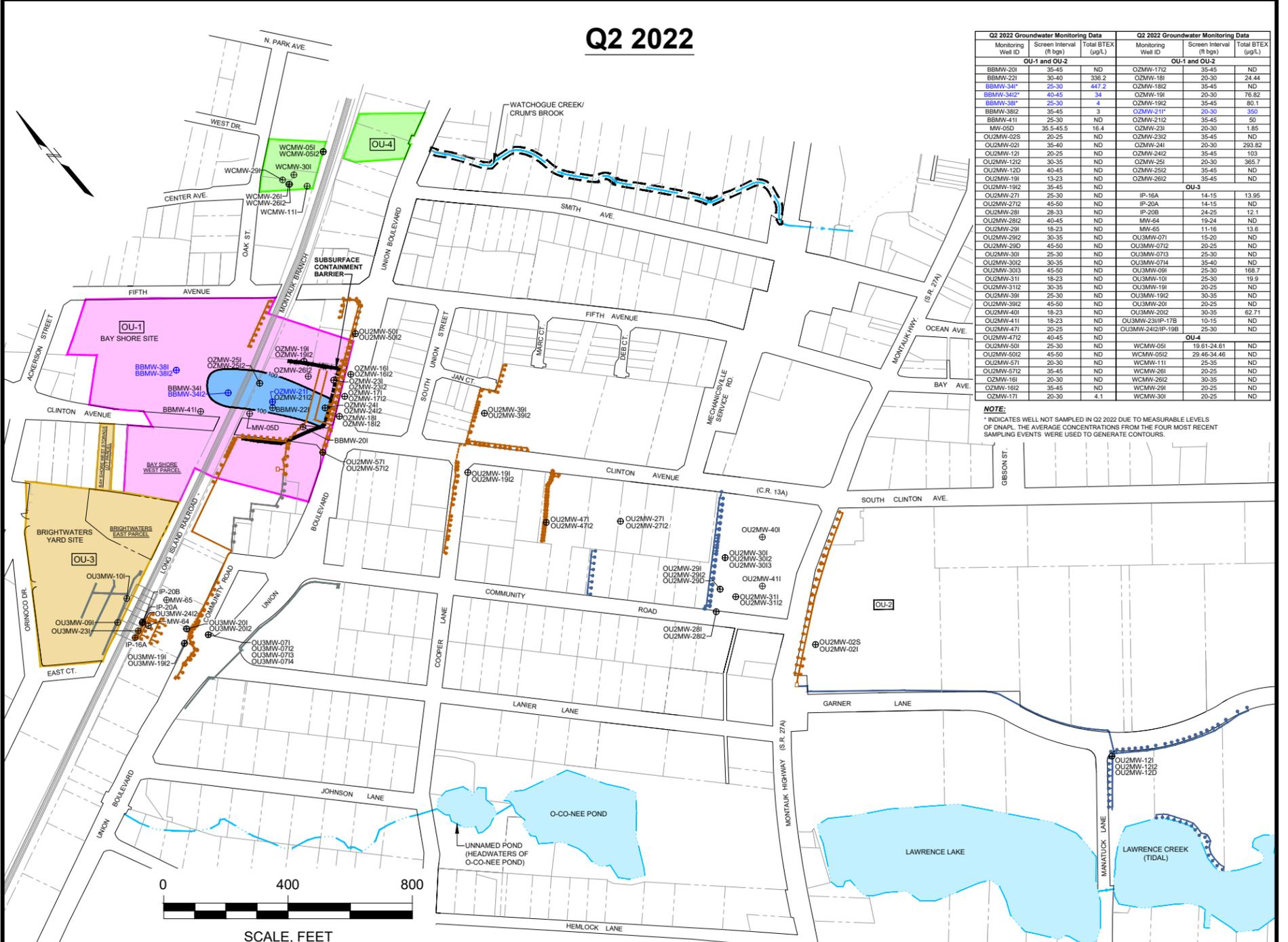
December 2022 Fig. 12

Q1 2009



Q1 2009 Groundwater Monitoring Data OU-1 and OU-2			Q1 2009 Groundwater Monitoring Data OU-1 and OU-2			Q1 2009 Groundwater Monitoring Data OU-1 and OU-2		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
BBMW-011	32-42	47	OU2MW-12D	40-45	ND	OU2MW-38I	46-51	ND
BBMW-021	30-40	ND	OU2MW-121	20-25	107	OU2MW-39I	25-30	ND
BBMW-031	30-40	ND	OU2MW-122	30-35	53	OU2MW-39II	45-50	ND
BBMW-071	30-40	ND	OU2MW-130	35-40	34	OU2MW-40I	15-23	270
BBMW-151	23-28	146	OU2MW-131	20-25	13	OU2MW-41I	18-23	1,433
BBMW-152	35-45	ND	OU2MW-141	20-25	ND	OU2MW-45I	20-25	10
BBMW-161	35-45	ND	OU2MW-142	45-50	ND	OU2MW-45II	40-45	ND
BBMW-201	35-45	8	OU2MW-150	40-45	ND	OU2MW-46I	20-25	1,991
BBMW-221	30-40	43	OU2MW-151	20-25	ND	OU2MW-46II	40-45	375
BBMW-231	33-43	ND	OU2MW-152	30-35	ND	OU2MW-47I	20-25	2,714
BBMW-241	32-42	10	OU2MW-160	35-40	ND	OU2MW-47II	40-45	159
BBMW-251	25-35	469	OU2MW-161	15-20	ND	OU2MW-16I	20-30	441
GM-05I	35.05-48.05	ND	OU2MW-162	25-30	ND	OU2MW-16II	35-40	12
GMP-01	25-30	782	OU2MW-171	13-23	80	OU2MW-17I	20-30	74
GMP-02	28-33	ND	OU2MW-172	35-40	ND	OU2MW-17II	35-45	ND
GMP-04	15.5-20.5	ND	OU2MW-181	13-23	28,040	OU2MW-18I	20-30	178
MW-03D	35-45	ND	OU2MW-182	35-45	ND	OU2MW-18II	35-45	129
MW-05D	35.5-45.5	26	OU2MW-191	13-23	82	OU2MW-22I	20-30	607
MW-09I	30-40	ND	OU2MW-192	35-45	103	OU2MW-23I	35-45	2
OU2MW-011	35-40	2	OU2MW-201	13-23	819	OU-3		
OU2MW-018	20-25	69	OU2MW-202	35-45	ND	BBMW-09I	20-30	ND
OU2MW-021	35-40	370	OU2MW-211	13-23	4,930	BBMW-28I	10-20	ND
OU2MW-025	20-25	5	OU2MW-212	35-45	479	BBMW-30I	30-35	ND
OU2MW-031	35-40	366	OU2MW-221	25-30	125	BBMW-30II	14-19	ND
OU2MW-035	20-25	30	OU2MW-232	46-51	ND	BBMW-31I	30-35	3
OU2MW-041	35-40	97	OU2MW-231	25-30	157	BBMW-31II	14-19	3
OU2MW-045	20-25	841	OU2MW-232	45-50	ND	BBMW-32I	30-35	ND
OU2MW-05	25-35	466	OU2MW-241	25-30	2,153	BBMW-32II	14-19	ND
OU2MW-06	15-25	ND	OU2MW-242	45-50	ND	MW-02IR	22.5-23.5	ND
OU2MW-07	15-25	ND	OU2MW-251	25-30	276	MW-19I	14-19	ND
OU2MW-08	35-40	46	OU2MW-252	45-50	ND	MW-26D	14-19	ND
OU2MW-08S	20-25	1,078	OU2MW-261	13-23	287	MW-26D	14-19	ND
OU2MW-09	20-30	ND	OU2MW-262	35-45	1,569	MW-34D	27.5-28.5	ND
OU2MW-10D	35-40	78	OU2MW-281	28-33	93	MW-34I	18.5-19.5	ND
OU2MW-10I	20-25	76	OU2MW-282	40-45	1	MW-54	19-24	ND
OU2MW-11D	40-45	8	OU2MW-290	45-50	359	MW-65	11-16	ND
OU2MW-11I	20-25	170	OU2MW-291	18-23	1,122	MW-66D	24-29	ND
OU2MW-112	30-35	98	OU2MW-292	30-35	87	MW-65-02D	24-29.5	ND
			OU2MW-29D	45-50	359	MW-65-02I	14.5-15.5	ND
			OU2MW-301	25-30	208	OU-4		
			OU2MW-302	30-35	43	WCMW-011	35-45	ND
			OU2MW-303	45-50	254	WCMW-021	34.5-44.5	ND
			OU2MW-311	18-23	779	WCMW-03I	19.4-24.4	ND
			OU2MW-312	30-35	1	WCMW-03II	28.55-33.55	ND
			OU2MW-320	40-45	25	WCMW-04I	19-24.4	ND
			OU2MW-321	20-25	3,698	WCMW-04II	29.55-34.55	ND
			OU2MW-322	30-35	71	WCMW-05I	19.61-24.61	ND
			OU2MW-331	20-25	3,159	WCMW-05II	29.46-34.46	ND
			OU2MW-332	30-35	77	WCMW-06I	19.55-24.55	ND
			OU2MW-341	25-30	2,248	WCMW-06II	29.61-34.61	ND
			OU2MW-342	45-50	ND	WCMW-10S	15-20	ND
			OU2MW-351	25-30	9	WCMW-10D	40-50	ND
			OU2MW-392	45-50	ND	WCMW-12I	25-30	ND
			OU2MW-391	25-30	59	WCMW-12II	25-30	ND
			OU2MW-392	45-50	ND	WCMW-14I	20-25	ND
			OU2MW-371	25-30	373	WCMW-14II	30-35	ND
			OU2MW-372	45-50	ND	WCMW-18I	20-25	ND
			OU2MW-381	25-30	122	WCMW-18II	30-35	ND

Q2 2022



Q2 2022 Groundwater Monitoring Data OU-1 and OU-2			Q2 2022 Groundwater Monitoring Data OU-1 and OU-2		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
BBMW-201	35-45	ND	OU2MW-1712	35-45	ND
BBMW-221	30-40	338.2	OU2MW-191	20-30	24.44
BBMW-34I*	25-30	447.2	OU2MW-1812	35-45	ND
BBMW-34I2*	40-45	34	OZMW-19I	20-30	76.82
BBMW-38I*	25-30	4	OU2MW-1912	35-45	80.1
BBMW-38I2*	35-45	3	OU2MW-211I	20-30	350
BBMW-411	25-30	ND	OZMW-2112	35-45	50
MW-05D	35.5-45.5	16.4	OU2MW-231	20-30	1.85
OU2MW-02S	20-25	ND	OZMW-2312	35-45	ND
OU2MW-021	35-40	ND	OZMW-241	20-30	253.82
OU2MW-121	20-25	ND	OZMW-2412	35-45	103
OU2MW-1212	30-35	ND	OZMW-251	20-30	365.7
OU2MW-12D	40-45	ND	OZMW-2512	35-45	ND
OU2MW-191	13-23	ND	OZMW-2612	35-45	ND
OU2MW-192	35-45	ND	OU-3		
OU2MW-271	25-30	ND	IP-16A	14-15	13.95
OU2MW-2712	45-50	ND	IP-20A	14-15	ND
OU2MW-281	28-33	ND	IP-20B	24-25	12.1
OU2MW-2812	40-45	ND	MW-54	19-24	19.24
OU2MW-291	18-23	ND	MW-65	11-16	13.6
OU2MW-2912	30-35	ND	OU3MW-071	15-20	ND
OU2MW-29D	45-50	ND	OU3MW-0712	20-25	ND
OU2MW-301	25-30	ND	OU3MW-0713	25-30	ND
OU2MW-3012	30-35	ND	OU3MW-0714	35-40	ND
OU2MW-3013	45-50	ND	OU3MW-091	25-30	168.7
OU2MW-311	18-23	ND	OU3MW-101	25-30	19.9
OU2MW-3112	30-35	ND	OU3MW-191	20-25	ND
OU2MW-391	25-30	ND	OU3MW-1912	35-45	ND
OU2MW-3912	45-50	ND	OU3MW-201	20-25	ND
OU2MW-401	18-23	ND	OU3MW-2012	30-35	62.71
OU2MW-411	18-23	ND	OU3MW-231IP-17B	10-15	ND
OU2MW-471	20-25	ND	OU3MW-242IP-19B	25-30	ND
OU2MW-4712	40-45	ND	OU-4		
OU2MW-501	25-30	ND	WCMW-05I	19.61-24.61	ND
OU2MW-5012	45-50	ND	WCMW-05II	29.46-34.46	ND
OU2MW-571	20-30	ND	WCMW-11I	25-35	ND
OU2MW-5712	35-45	ND	WCMW-28I	20-25	ND
OU2MW-161	20-30	ND	WCMW-28II	30-35	ND
OU2MW-1612	35-45	ND	WCMW-29I	20-25	ND
OZMW-171	20-30	4.1	WCMW-30I	20-25	ND

NOTE:
* INDICATES WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- BBMW-38I WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- BTEx ≥ 100 µg/L
- BTEx ≥ 1,000 µg/L
- BTEx ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)
- BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE

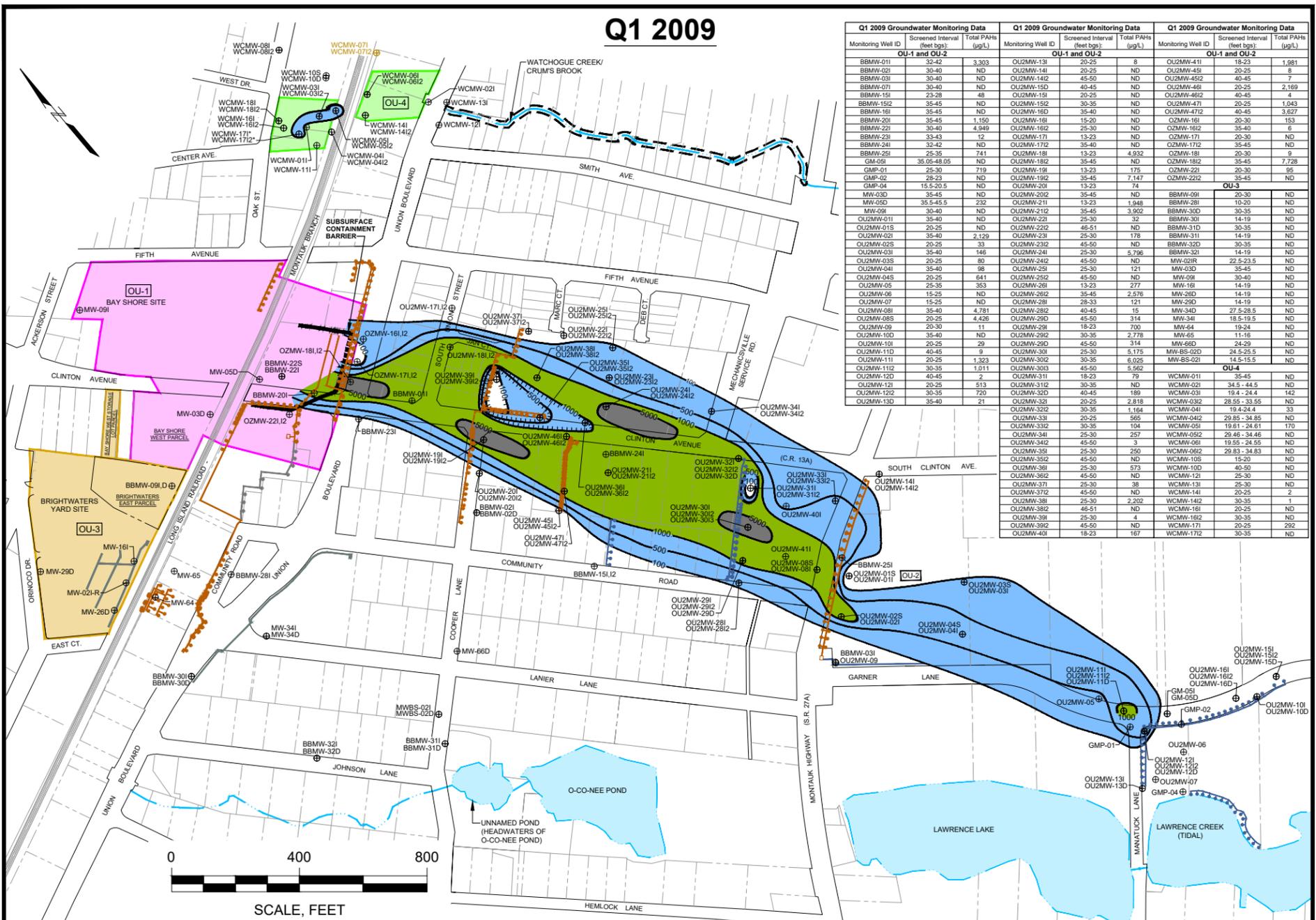
NOTE:
WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

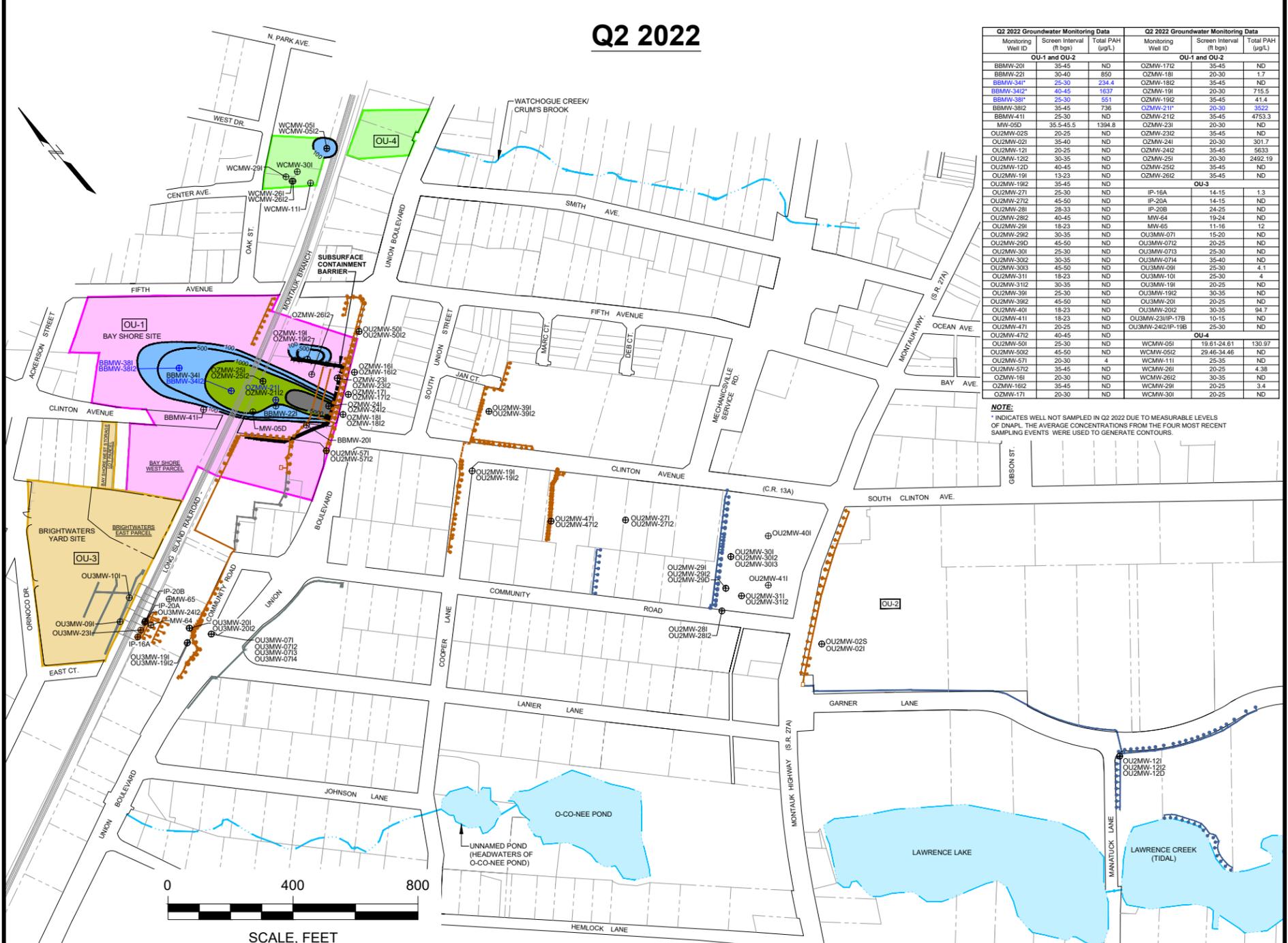
**INTERMEDIATE GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(10-50 FEET BGS)**

Project 1905774 December 2022 Fig. 13

Q1 2009



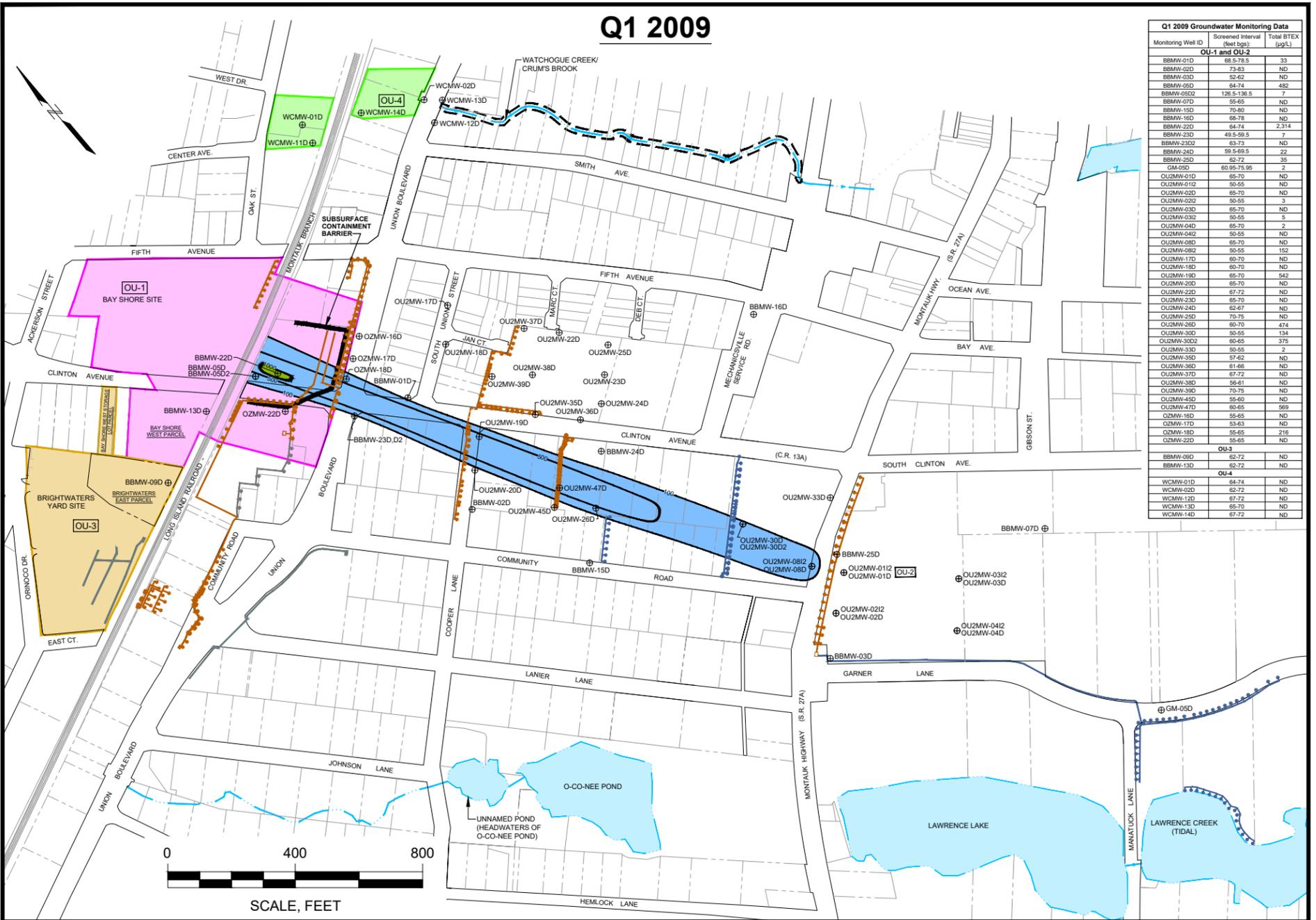
Q2 2022



NOTE: INDICATES WELLS NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

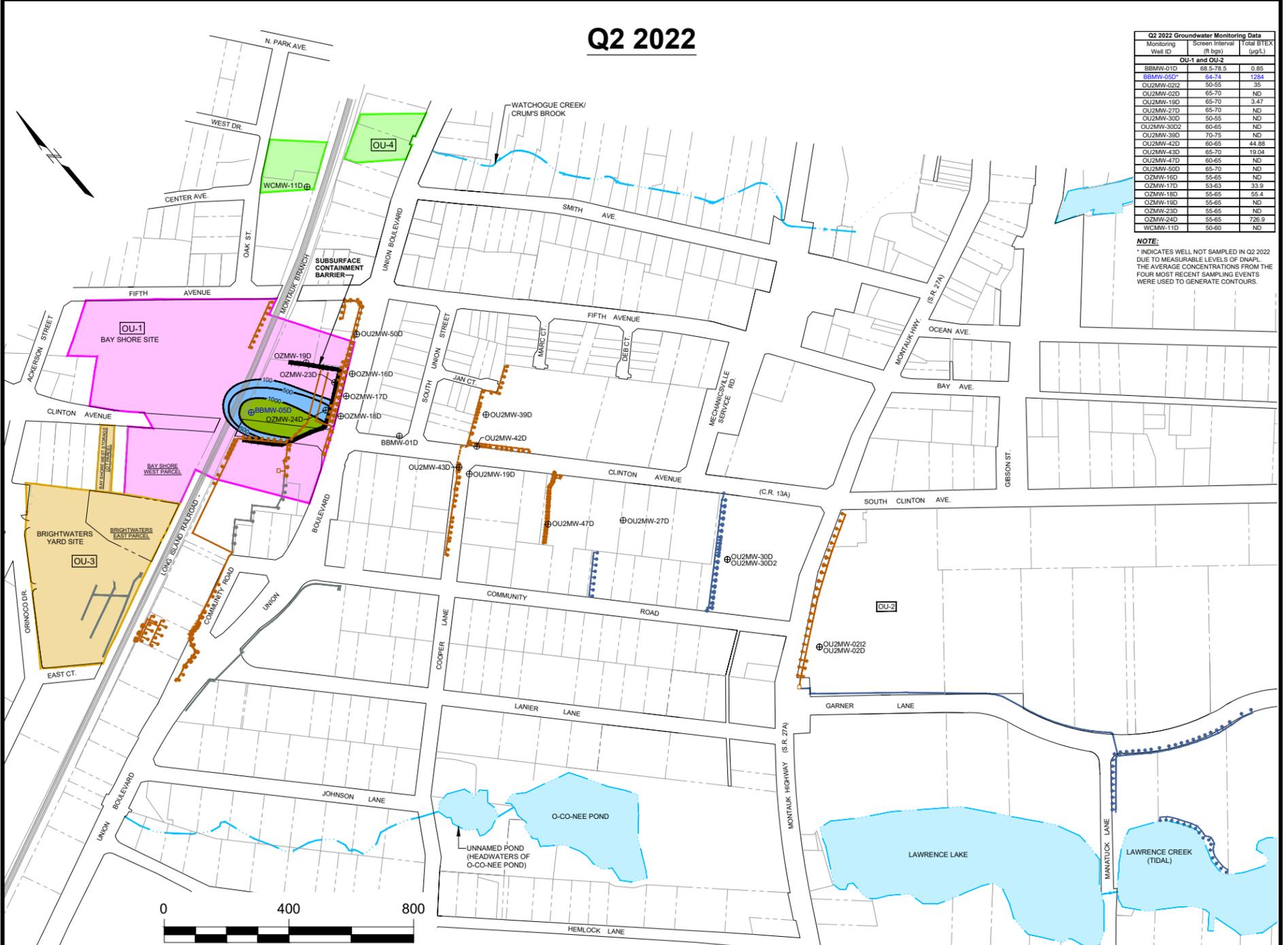
	LEGEND:	
	EXISTING MONITORING WELL CLUSTER LOCATION	WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL
µg/L	MICROGRAMS PER LITER	PAH
PAH	TOTAL PAH ≥ 100 µg/L	TOTAL PAH ≥ 1,000 µg/L
PAH	TOTAL PAH ≥ 5,000 µg/L	
OXYGEN INJECTION LINE - INSTALLED	OXYGEN INJECTION LINE - SHUT OFF	OXYGEN INJECTION LINE - ABANDONED
ISO-CONCENTRATION LINE (µg/L)	POLYCYCLIC AROMATIC HYDROCARBONS	
NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).		
Bay Shore/Brightwaters Former MGP Site Bay Shore, New York		
Project 1905774		
December 2022		Fig. 14

Q1 2009



Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	33
BBMW-02D	73-83	ND
BBMW-03D	52-62	ND
BBMW-05D	64-74	482
BBMW-05D2	126.5-136.5	7
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-16D	68-78	ND
BBMW-22D	64-74	2,314
BBMW-23D	49.5-59.5	7
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	22
BBMW-25D	62-72	35
GM-05D	60.95-70.95	2
OU2MW-01D	65-75	ND
OU2MW-02D	50-55	ND
OU2MW-02D	65-70	ND
OU2MW-02D	50-55	3
OU2MW-02D	65-70	ND
OU2MW-03D	50-55	5
OU2MW-04D	65-70	2
OU2MW-04D	50-55	ND
OU2MW-09D	65-70	ND
OU2MW-08D	50-55	152
OU2MW-17D	60-70	ND
OU2MW-18D	60-70	ND
OU2MW-19D	65-70	154
OU2MW-20D	65-70	ND
OU2MW-22D	67-72	ND
OU2MW-24D	65-70	ND
OU2MW-25D	70-75	ND
OU2MW-26D	60-70	474
OU2MW-28D	61-66	ND
OU2MW-30D	69-65	375
OU2MW-30D2	50-55	2
OU2MW-35D	57-62	ND
OU2MW-36D	61-66	ND
OU2MW-37D	67-72	ND
OU2MW-38D	56-61	ND
OU2MW-39D	70-75	ND
OU2MW-43D	55-65	ND
OU2MW-47D	60-65	569
OU2MW-48D	55-65	ND
OU2MW-17D	53-63	ND
OU2MW-24D	55-65	729.9
OU2MW-22D	55-65	ND
OU-3		
BBMW-09D	62-72	ND
BBMW-13D	62-72	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-72	ND
WCMW-14D	65-70	ND
WCMW-11D	67-72	ND

Q2 2022



Q2 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	0.85
BBMW-05D	64-74	1284
OU2MW-02D	50-55	35
OU2MW-02D	65-70	ND
OU2MW-19D	65-70	3.47
OU2MW-27D	65-70	ND
OU2MW-30D	50-55	ND
OU2MW-30D2	60-65	ND
OU2MW-39D	70-75	ND
OU2MW-42D	63-65	44.88
OU2MW-43D	65-70	19.04
OU2MW-47D	60-65	ND
OU2MW-50D	65-70	ND
OZMW-16D	55-65	ND
OZMW-17D	53-63	33.9
OZMW-18D	55-65	55.4
OZMW-19D	55-65	ND
OZMW-24D	55-65	729.9
WCMW-11D	50-60	ND

NOTE:
 * INDICATES WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- ⊕BBMW-05D WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- BTEX ≥ 100 µg/L
- BTEX ≥ 1,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)
- BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE

Bay Shore/Brightwaters
 Former MGP Site
 Bay Shore, New York

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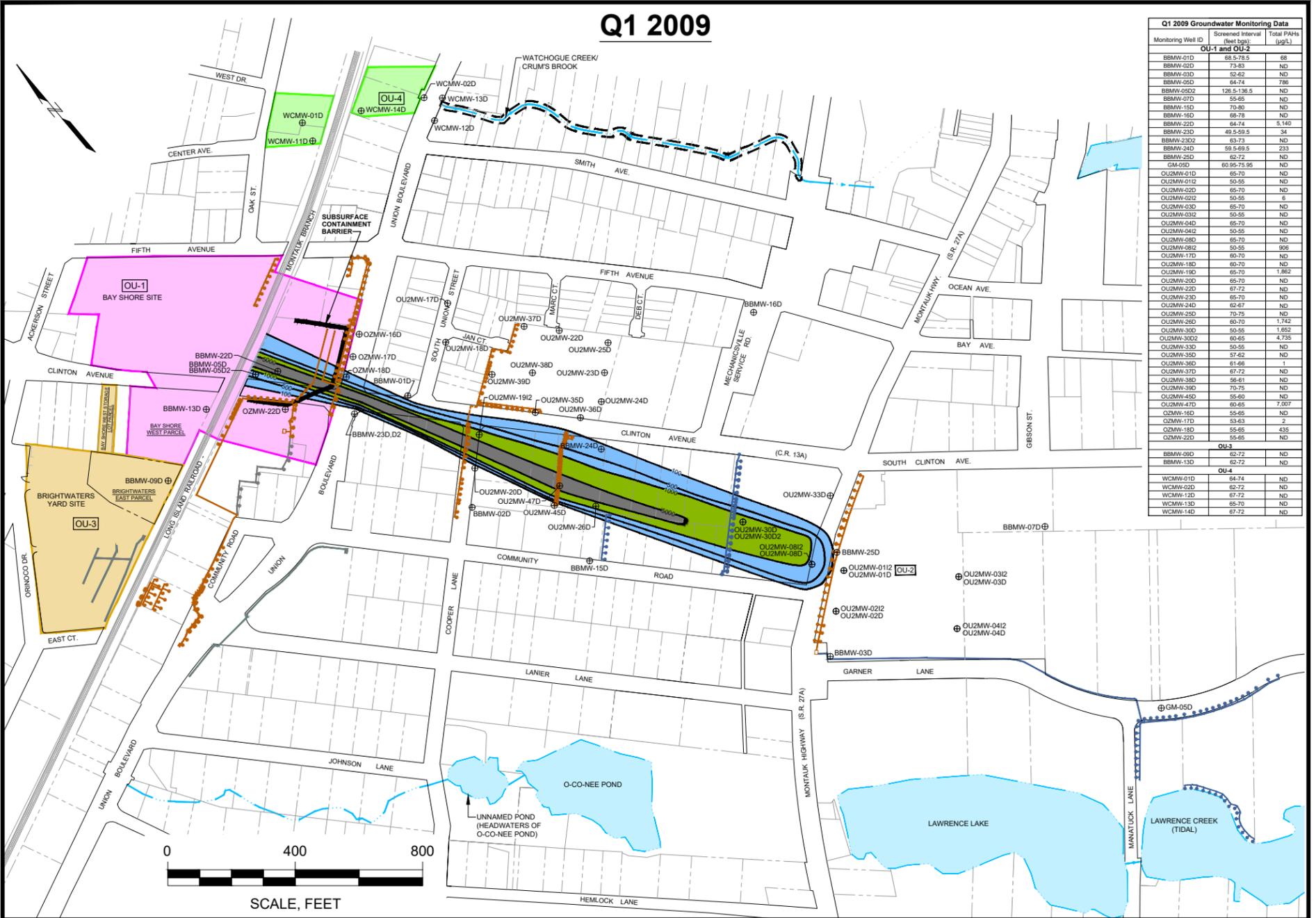
Project 1905774

DEEP GROUNDWATER
 TOTAL BTEX
 ISO-CONCENTRATION MAPS
 (BELOW 50 FEET BGS)

December 2022

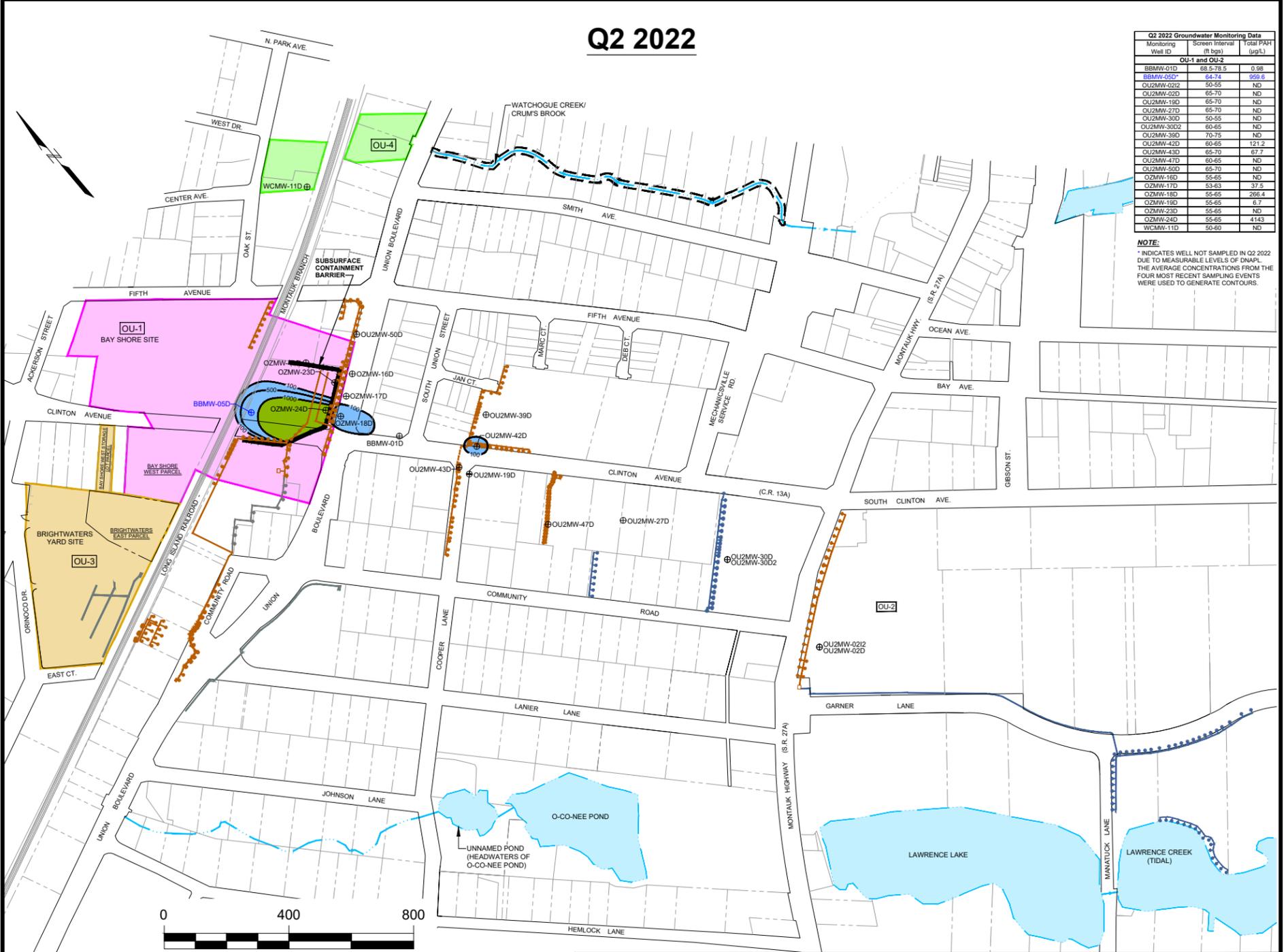
Fig. 15

Q1 2009



Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	68
BBMW-02D	73-83	ND
BBMW-03D	52-63	ND
BBMW-05D	64-74	786
BBMW-05D2	126.5-136.5	ND
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-16D	68-78	ND
BBMW-22D	64-74	5,140
BBMW-23D	49.5-59.5	34
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	233
BBMW-25D	62-72	ND
GM-05D	60.95-75.95	ND
OZ2MW-01D	65-75	ND
OZ2MW-012	50-55	ND
OZ2MW-02D	65-70	ND
OZ2MW-0212	50-55	6
OZ2MW-03D	65-70	ND
OZ2MW-0312	50-55	ND
OZ2MW-04D	65-70	ND
OZ2MW-0412	50-55	ND
OZ2MW-08D	65-70	ND
OZ2MW-0812	50-55	906
OZ2MW-17D	60-70	ND
OZ2MW-18D	60-70	ND
OZ2MW-19D	65-70	1,862
OZ2MW-20D	65-70	ND
OZ2MW-22D	67-72	ND
OZ2MW-23D	65-70	1,742
OZ2MW-24D	62-67	ND
OZ2MW-25D	70-75	ND
OZ2MW-26D	60-70	1,652
OZ2MW-30D	55-65	ND
OZ2MW-30D2	60-65	4,735
OZ2MW-33D	50-55	ND
OZ2MW-35D	57-62	ND
OZ2MW-36D	61-66	ND
OZ2MW-37D	67-72	ND
OZ2MW-38D	56-61	ND
OZ2MW-39D	70-75	ND
OZ2MW-45D	55-65	ND
OZ2MW-47D	60-65	7,007
OZ2MW-18D	55-65	ND
OZ2MW-17D	53-63	ND
OZ2MW-18D	55-65	435
OZ2MW-22D	55-65	ND
OU-3		
BBMW-03D	62-72	ND
BBMW-13D	65-75	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-72	ND
WCMW-14D	65-70	ND
WCMW-14D	67-72	ND

Q2 2022



Monitoring Well ID	Screen Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	0.98
BBMW-05D	64-74	599.8
OZ2MW-0212	50-55	ND
OZ2MW-02D	65-70	ND
OZ2MW-19D	65-70	ND
OZ2MW-27D	65-70	ND
OZ2MW-30D	50-55	ND
OZ2MW-30D2	60-65	ND
OZ2MW-39D	70-75	ND
OZ2MW-42D	60-65	121.2
OZ2MW-43D	65-70	67.7
OZ2MW-47D	60-65	ND
OZ2MW-50D	65-70	ND
OZ2MW-16D	55-65	ND
OZ2MW-17D	53-63	37.5
OZ2MW-18D	55-65	286.4
OZ2MW-19D	55-65	6.7
OZ2MW-24D	55-65	ND
OZ2MW-24D	55-65	4143
WCMW-11D	50-60	ND

NOTE:
 * INDICATES WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- ⊕BBMW-05D WELL NOT SAMPLED IN Q2 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- TOTAL PAH ≥ 100 µg/L
- TOTAL PAH ≥ 1,000 µg/L
- TOTAL PAH ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)
- POLYCYCLIC AROMATIC HYDROCARBONS

Bay Shore/Brightwaters
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nationalgrid

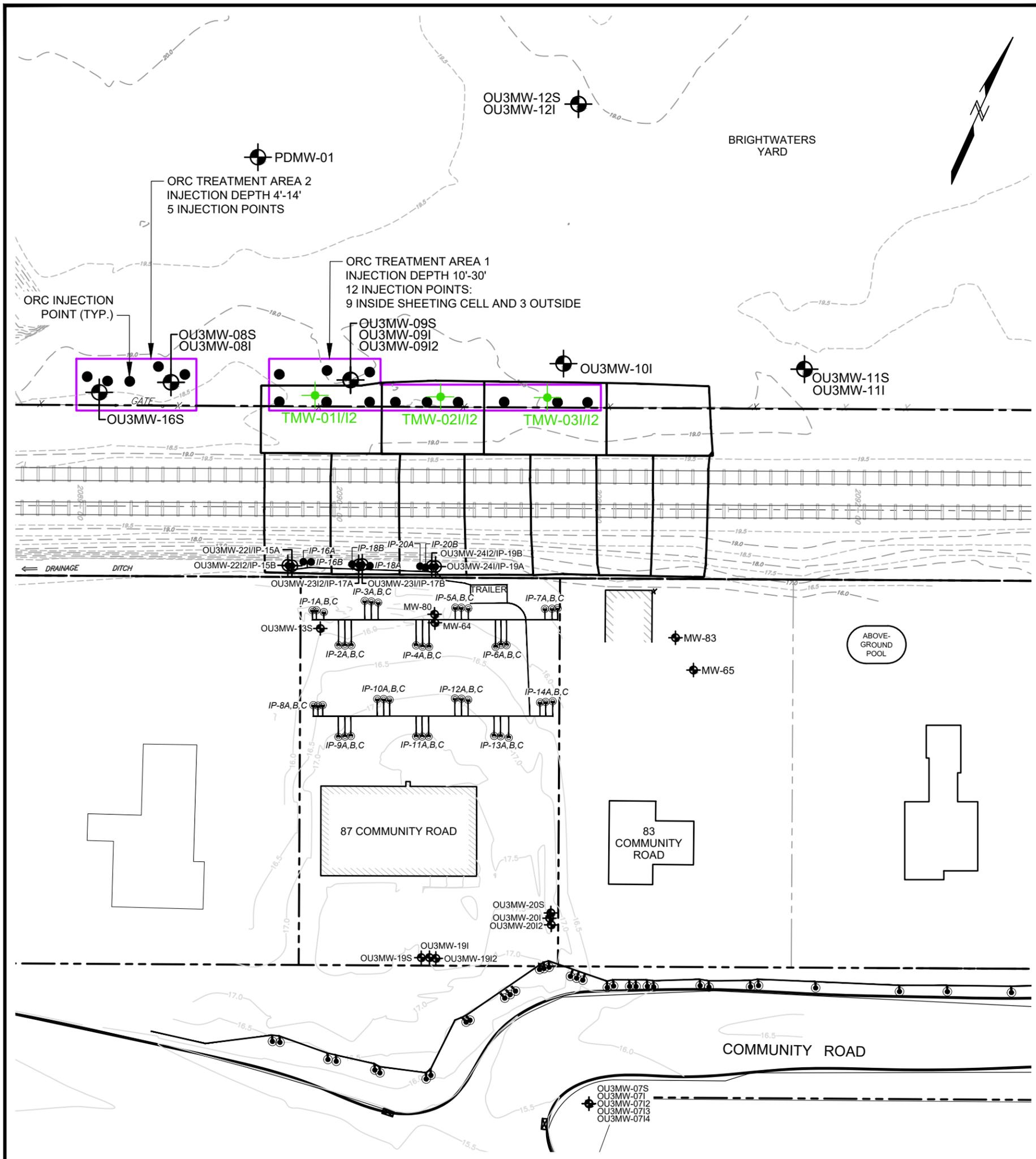
GEI Consultants

Project 1905774

DEEP GROUNDWATER
 TOTAL PAH
 ISO-CONCENTRATION MAPS
 (BELOW 50 FEET BGS)

December 2022

Fig. 16



SOURCES:

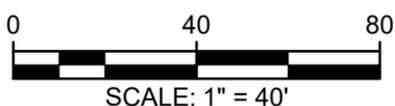
- BOUNDARY AND TOPOGRAPHIC SURVEYS OF SEC. 391, BLOCK 1 SUFFOLK COUNTY, NEW YORK PREPARED BY KS ENGINEERS, P.C., 24 COMMERCE STREET, NEWARK, N.J. 07102 DATED 07/09/09, 01/21/11 AND 07/06/2011.
- LIRR EXCAVATION IRM PHASES I, II, AND III WERE SURVEYED IN JANUARY, MAY, AND SEPTEMBER 2010 BY KS ENGINEERS, P.C., RESPECTIVELY.
- 2004 IRM EXCAVATION LOCATIONS ARE APPROXIMATE AND BASED ON "FIGURE 3 BRIGHTWATERS YARD PHASE I SUPPLEMENTAL IRM ACTIVITIES" OF THE FINAL SUPPLEMENTAL IRM COMPLETION REPORT PREPARED BY PAULUS, SOKOLOWSKI AND SARTOR, ENGINEERING P.C.

SURVEYORS NOTES:

- VERTICAL DATUM NAVD 88 AND HORIZONTAL DATUM NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM (NAD 83) ESTABLISHED BY GLOBAL POSITIONING SYSTEM METHODOLOGY
- R.O.W. AND BASELINE OF THE LONG ISLAND RAILROAD ESTABLISHED PER A CERTAIN MAP TITLED "STATION MAP-LANDS, THE LONG ISLAND RAILROAD COMPANY OPERATED BY THE LONG ISLAND RAILROAD COMPANY, MONTAUK DIVISION, STATION 2104+56.57 TO STATION 2154+65.772", DATED JUNE 30, 1916, FOUND IN THE OFFICE OF THE VALUATION ENGINEER, JAMAICA, NEW YORK, SHEETS V1/65 & V1/66.
- MAP REFERENCE: A CERTAIN MAP TITLED "LAWRANCE FARM CORPORATION, SECTION ONE, BAY SHORE, SUFFOLK CO., NEW YORK", PREPARED BY EUGENE R. SMITH, C.E., ISLIP, NY DATED MARCH-1923 AND FILED ON APRIL 28, 1923 AS FILE No. 776.

LEGEND:

- EXISTING BUILDING
- BUILDING NOT SURVEYED
- PROPERTY LINE (SURVEYED)
- PROPERTY LINE (APPROXIMATE)
- FENCE
- LIRR ROW
- EXISTING GROUND SURFACE CONTOUR (FT)
- EXISTING RAILROAD RAIL
- GROUNDWATER MONITORING WELL CLUSTER (S = SHALLOW, I = INTERMEDIATE)
- FT BGS
- SHEETING LEFT IN PLACE (2 FT - 30 FT BGS)
- OXYGEN INJECTION SYSTEM
- TEMPORARY MONITORING WELL CLUSTER - SEPTEMBER 2019
- APPROXIMATE ORC-A INJECTION POINT



Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York



ORC-A APPLICATION

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Fig. 17

Appendix A

Groundwater Monitoring Program Tracking Summary

Appendix A. Groundwater Monitoring Program Tracking Summary
Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
<i>OU-1 Monitoring Wells</i>						
BBMW-05D	74	64-74	X	X	X	X
BBMW-20I	45	35-45	X	X	X	X
BBMW-22S	10	5-10	X	X	X	X
BBMW-22I	10	30-40	X	X	X	X
BBMW-22D	10	64-74	.*	.*	.*	.*
BBMW-34S	10	5-15	X	X	X	X
BBMW-34I	10	25-30	X	X	X	X
BBMW-34I2	10	40-45	.*	.*	.*	.*
BBMW-37S	10	5-15	X	X	X	X
BBMW-38S	10	5-15	X	X	X	X
BBMW-38I	10	25-30	.*	.*	.*	.*
BBMW-38I2	10	40-45	.*	.*	.*	.*
BBMW-38D	10	65-70	-	-	-	-
BBMW-39S	10	5-15	X	X	X	X
BBMW-39I	10	25-30	-	-	-	-
BBMW-39I2	10	45-50	-	-	-	-
BBMW-39D	10	65-70	-	-	-	-
BBMW-40S	10	5-15	X	X	-	X
BBMW-40I	10	25-30	-	-	-	-
BBMW-40I2	10	45-50	-	-	-	-
BBMW-40D	10	70-75	-	-	-	-
BBMW-41S	10	6-16	X	X	X	X
BBMW-41I	10	25-30	-	-	X	X
BBMW-41I2	10	45-50	-	-	-	-
BBMW-41D	10	65-70	-	-	-	-
BBMW-42S	10	5-10	X	X	X	X

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
BBMW-42I	10	15-25	-	-	-	-
BBMW-42I2	10	35-45	-	-	-	-
BBMW-43S	10	5-10	-	-	-	-
BBMW-43I	10	15-25	-	-	-	-
BBMW-43I2	10	35-45	-	-	-	-
MW-03S	10	3-13	-	-	-	-
MW-03D	10	35-45	-	-	-	-
MW-05S	10	4-14	X	X	X	X
MW-05D	10	35.5-45.5	X	X	X	X
MW-09S	10	4-14	-	-	-	-
MW-09I	10	30-40	-	-	-	-
MW-09I2	10	45-50	-	-	-	-
MW-09D	10	65-70	-	-	-	-
OU2MW-48S	10	3-13	-	-	-	-
OU2MW-48I	10	25-30	-	-	-	-
OU2MW-48I2	10	45-50	-	-	-	-
OU2MW-48D	10	65-70	-	-	-	-
OU2MW-49S	10	3-13	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-49I	10	25-30	-	-	-	-
OU2MW-49I2	10	45-50	-	-	-	-
OU2MW-49D	10	63-68	-	-	-	-
OU2MW-50S	10	5-15	X	X	X	X
OU2MW-50I	10	25-30	X	X	X	X
OU2MW-50I2	10	45-50	X	X	X	X
OU2MW-50D	10	65-70	X	X	X	X
OU2MW-51S	10	5-15	-	-	-	-
OU2MW-51I	10	25-30	-	-	-	-
OU2MW-51I2	10	45-50	-	-	-	-
OU2MW-51D	10	61-66	-	-	-	-
OU2MW-57S	10	5-15	X	X	X	X
OU2MW-57I	10	20-30	X	X	X	X
OU2MW-57I2	10	35-45	X	X	X	X
OZMW-16S	10	5-15	X	X	X	X
OZMW-16I	10	20-25	X	X	X	X
OZMW-16I2	10	35-40	X	X	X	X
OZMW-16D	10	55-60	X	X	X	X
OZMW-17S	10	5-15	X	X	X	X
OZMW-17I	10	20-25	X	X	X	X
OZMW-17I2	10	35-40	X	X	X	X
OZMW-17D	10	53-63	X	X	X	X
OZMW-18S	10	5-15	X	X	X	X
OZMW-18I	10	20-25	X	X	X	X
OZMW-18I2	10	35-40	X	X	X	X
OZMW-18D	10	55-60	X	X	X	X
OZMW-19S	10	5-15	X	X	X	X

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OZMW-19I	10	20-25	X	X	X	X
OZMW-19I2	10	35-40	X	X	X	X
OZMW-19D	10	55-60	-	-	-	X
OZMW-21S	10	5-15	.*	.*	.*	.*
OZMW-21I	10	20-25	.*	.*	.*	.*
OZMW-21I2	10	35-40	X	X	X	X
OZMW-21D	10	55-60	.*	.*	.*	.*
OZMW-22SR	10	5-15	-	-	-	X
OZMW-22IR	10	20-30	-	-	-	-
OZMW-23S	10	5-15	X	X	X	X
OZMW-23I	10	20-25	X	X	X	X
OZMW-23I2	10	35-40	X	X	X	X
OZMW-23D	10	55-65	X	X	X	X
OZMW-24S	10	5-15	X	X	X	X
OZMW-24I	10	20-25	X	X	X	X
OZMW-24I2	10	35-40	X	X	X	X
OZMW-24D	10	55-65	X	X	X	X
OZMW-25S	10	5-15	X	X	X	X
OZMW-25I	10	20-25	X	X	X	X

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OZMW-25I2	10	35-40	X	X	X	X
OZMW-25D	10	55-65	-	-	-	-
OZMW-26S	10	5-15	-	-	-	-
OZMW-26I	10	20-25	-	-	-	-
OZMW-26I2	10	35-40	X	X	X	X
OZMW-26D	10	55-65	-	-	-	-
OUIPZ-101	10	4-14	X	X	X	X
OUIPZ-102	10	4-14	X	X	X	X
OUIPZ-103	10	4-14	X	X	X	X
OUIPZ-104	10	4-14	-	-	X	X
OUIPZ-105	10	4-14	X	X	X	X
			53	53	54	57
<i>OU-2 Monitoring Wells</i>						
BBMW-01S	1-15	5-15	-	-	-	-
BBMW-01I	42	32-42	-	-	-	-
BBMW-01D	78.5	68.5-78.5	X	X	X	X
BBMW-02S	15	5-15	-	-	-	-
BBMW-02I	40	30-40	-	-	-	-
BBMW-02D	73	63-73	-	-	-	-
BBMW-03S	13	3-13	-	-	-	-
BBMW-03I	40	30-40	-	-	-	-
BBMW-03D	83	73-83	-	-	-	-
BBMW-07S	15	5-15	-	-	-	-
BBMW-07I	40	30-40	-	-	-	-
BBMW-07D	65	55-65	-	-	-	-
BBMW-15S	15	5-15	-	-	-	-
BBMW-15I	28	23-28	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
BBMW-15I2	45	35-45	-	-	-	-
BBMW-15D	80	70-80	-	-	-	-
BBMW-16S	15	5-15	-	-	-	-
BBMW-16I	45	35-45	-	-	-	-
BBMW-16D	78	68-78	-	-	-	-
BBMW-23S	15	5-15	X	X	X	X
BBMW-23I	43	33-43	-	-	-	-
BBMW-23D	59.5	49.5-59.5	-	-	-	-
BBMW-23D2	73	63-73	-	-	-	-
BBMW-24S	14	4-14	-	-	-	-
BBMW-24I	42	32-42	-	-	-	-
BBMW-24D	69.5	59.5-69.5	-	-	-	-
BBMW-25S	14	4-14	-	-	-	-
BBMW-25I	35	25-35	-	-	-	-
BBMW-25D	72	62-72	X	X	X	X
GM-05S	20.1	5.1-20.1	-	-	-	-
GM-05I	48.05	35.05-48.05	-	-	-	-
GM-05D	75.95	60.95-75.95	-	-	-	-
GM-06S	unknown	unknown	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
GM-06I	unknown	unknown	-	-	-	-
GM-06D	unknown	unknown	-	-	-	-
GM-07S	24.75	9.75-24.75	-	-	-	-
GM-07I	44.6	29.6-44.6	-	-	-	-
GM-07D	65.3	50.3-65.3	-	-	-	-
GM-08S	21.35	6.35-21.35	-	-	-	-
GM-08I	44.95	29.95-44.95	-	-	-	-
GM-08D	63.25	48.25-63.25	-	-	-	-
GM-09S	19.7	4.7-19.7	-	-	-	-
GM-09I	43.7	28.7-43.7	-	-	-	-
GM-09D	63.35	48.35-63.35	-	-	-	-
GM-10S	unknown	unknown	-	-	-	-
GM-10I	unknown	unknown	-	-	-	-
GM-10D	unknown	unknown	-	-	-	-
GM-10AD	unknown	unknown	-	-	-	-
GMP-01	30	25-30	-	-	-	-
GMP-02	23	18-23	-	-	-	-
GMP-04	20.5	15.5-20.5	-	-	-	-
MW-16AS	13	3.0-13.0	-	-	-	-
MW-57W	10	2.0-10.0	-	-	-	-
MW-58W	10	2.0-10.0	-	-	-	-
OU2IW-01S	8	3-8	-	-	-	-
OU2MW-01WT	8	3-8	-	-	-	-
OU2MW-01S	25	20-25	-	-	-	-
OU2MW-01I	40	35-40	-	-	-	-
OU2MW-01I2	55	50-55	-	-	-	-
OU2MW-01D	70	65-70	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-02S	25	20-25	X	X	X	X
OU2MW-02I	40	35-40	X	X	X	X
OU2MW-02I2	55	50-55	X	X	X	X
OU2MW-02D	70	65-70	X	X	X	X
OU2MW-03S	25	20-25	-	-	-	-
OU2MW-03I	40	35-40	-	-	-	-
OU2MW-03I2	55	50-55	-	-	-	-
OU2MW-03D	70	65-70	-	-	-	-
OU2MW-04WT	8	3-8	-	-	-	-
OU2MW-04S	25	20-25	-	-	-	-
OU2MW-04I	40	35-40	-	-	-	-
OU2MW-04I2	55	50-55	-	-	-	-
OU2MW-04D	70	65-70	-	-	-	-
OU2MW-05	35	25-35	-	-	-	-
OU2MW-06	25	15-25	-	-	-	-
OU2MW-06S	8	3-8	-	-	-	-
OU2MW-07	25	15-25	-	-	-	-
OU2MW-07S	8	3-8	-	-	-	-
OU2MW-08WT	8	3-8	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-08S	25	20-25	-	-	-	-
OU2MW-08I	40	35-40	-	-	-	-
OU2MW-08I2	55	50-55	-	-	-	-
OU2MW-08D	70	65-70	-	-	-	-
OU2MW-09	40	30-40	-	-	-	-
OU2MW-10S	7	3-7	-	-	-	-
OU2MW-10I	25	20-25	-	-	-	-
OU2MW-10D	40	35-40	-	-	-	-
OU2MW-11S	8	3-8	-	-	-	-
OU2MW-11I	25	20-25	-	-	-	-
OU2MW-11I2	35	30-35	-	-	-	-
OU2MW-11D	45	40-45	-	-	-	-
OU2MW-12S	7	3-7	X	X	X	X
OU2MW-12I	25	20-25	X	X	X	X
OU2MW-12I2	35	30-35	X	X	X	X
OU2MW-12D	45	40-45	X	X	X	X
OU2MW-13S	8	3-8	-	-	-	-
OU2MW-13I	25	20-25	-	-	-	-
OU2MW-13D	40	35-40	-	-	-	-
OU2MW-14S	8	3-8	-	-	-	-
OU2MW-14I	25	20-25	-	-	-	-
OU2MW-14I2	50	45-50	-	-	-	-
OU2MW-15S	8	3-8	-	-	-	-
OU2MW-15I	25	20-25	-	-	-	-
OU2MW-15I2	25	30-25	-	-	-	-
OU2MW-15D	45	40-45	-	-	-	-
OU2MW-16S	8	3-8	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-16I	20	15-20	-	-	-	-
OU2M2-16I2	30	25-30	-	-	-	-
OU2MW-16D	40	35-40	-	-	-	-
OU2MW-17S	10	5-10	-	-	-	-
OU2MW-17I	23	13-23	-	-	-	-
OU2MW-17I2	45	35-45	-	-	-	-
OU2MW-17D	70	60-70	-	-	-	-
OU2MW-18I	23	13-23	-	-	-	-
OU2MW-18I2	45	35-45	-	-	-	-
OU2MW-18D	70	60-70	-	-	-	-
OU2MW-19I	23	13-23	X	X	X	X
OU2MW-19I2	45	35-45	X	X	X	X
OU2MW-19D	70	65-70	X	X	X	X
OU2MW-20S	9	4-9	-	-	-	-
OU2MW-20I	23	13-23	-	-	-	-
OU2MW-20I2	45	35-45	-	-	-	-
OU2MW-20D	70	65-70	-	-	-	-
OU2MW-21S	15	5-15	-	-	-	-
OU2MW-21I	23	13-23	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-21I2	45	35-45	-	-	-	-
OU2MW-22S	15	5-15	-	-	-	-
OU2MW-22I	30	25-30	-	-	-	-
OU2MW-22I2	51	46-51	-	-	-	-
OU2MW-22D	72	67-72	-	-	-	-
OU2MW-23S	15	5-15	-	-	-	-
OU2MW-23I	30	25-30	-	-	-	-
OU2MW-23I2	50	45-50	-	-	-	-
OU2MW-23D	70	65-70	-	-	-	-
OU2MW-24S	15	5-15	-	-	-	-
OU2MW-24I	30	25-30	-	-	-	-
OU2MW-24I2	50	45-50	-	-	-	-
OU2MW-24D	67	62-67	-	-	-	-
OU2MW-25S	15	5-15	-	-	-	-
OU2MW-25I	30	25-30	-	-	-	-
OU2MW-25I2	50	45-50	-	-	-	-
OU2MW-25D	75	70-75	-	-	-	-
OU2MW-26S	11	6-11	-	-	-	-
OU2MW-26I	23	13-23	-	-	-	-
OU2MW-26I2	45	35-45	-	-	-	-
OU2MW-26D	70	60-70	-	-	-	-
OU2MW-27S	15	5-15	X	X	X	X
OU2MW-27I	30	25-30	X	X	X	X
OU2MW-27I2	50	45-50	X	X	X	X
OU2MW-27D	70	65-70	X	X	X	X
OU2MW-28S	15	5-15	X	X	X	X
OU2MW-28I	33	28-33	X	X	X	X

Appendix A. Groundwater Monitoring Program Tracking Summary
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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-28I2	45	40-45	X	X	X	X
OU2MW-29I	23	18-23	X	X	X	X
OU2MW-29I2	35	30-35	X	X	X	X
OU2MW-29D	45	40-45	X	X	X	X
OU2MW-30S	15	5-15	X	X	X	X
OU2MW-30I	30	25-30	X	X	X	X
OU2MW-30I2	35	30-35	X	X	X	X
OU2MW-30I3	50	45-50	X	X	X	X
OU2MW-30D	55	50-55	X	X	X	X
OU2MW-30D2	65	60-65	X	X	X	X
OU2MW-31I	23	18-23	X	X	X	X
OU2MW-31I2	35	30-35	X	X	X	X
OU2MW-32S	15	5-15	-	-	-	-
OU2MW-32I	25	20-25	-	-	-	-
OU2MW-32I2	35	30-35	-	-	-	-
OU2MW-32D	45	40-45	-	-	-	-
OU2MW-33S	15	5-15	-	-	-	-
OU2MW-33I	30	25-30	-	-	-	-
OU2MW-33I2	40	35-40	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-33D	55	50-55	-	-	-	-
OU2MW-34S	15	5-15	-	-	-	-
OU2MW-34IR	30	25-30	-	-	-	-
OU2MW-34I2R	50	45-50	-	-	-	-
OU2MW-35S	15	5-15	-	-	-	-
OU2MW-35I	30	25-30	-	-	-	-
OU2MW-35I2	50	45-50	-	-	-	-
OU2MW-35D	62	57-62	-	-	-	-
OU2MW-36S	15	5-15	-	-	-	-
OU2MW-36I	30	25-30	-	-	-	-
OU2MW-36I2	50	45-50	-	-	-	-
OU2MW-36D	66	61-66	-	-	-	-
OU2MW-37S	15	5-15	-	-	-	-
OU2MW-37I	30	25-30	-	-	-	-
OU2MW-37I2	50	45-50	-	-	-	-
OU2MW-37D	72	67-72	-	-	-	-
OU2MW-38S	15	5-15	-	-	-	-
OU2MW-38I	30	25-30	-	-	-	-
OU2MW-38I2	51	46-51	-	-	-	-
OU2MW-38D	61	56-61	-	-	-	-
OU2MW-39S	15	5-15	X	X	X	X
OU2MW-39I	30	25-30	X	X	X	X
OU2MW-39I2	50	45-50	X	X	X	X
OU2MW-39D	75	70-75	X	X	X	X
OU2MW-40S	15	5-15	X	X	X	X
OU2MW-40I	23	18-23	X	X	X	X
OU2MW-41S	15	5-15	X	X	X	X

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-41I	23	18-23	X	X	X	X
OU2MW-42S	15	5-15	-	-	-	-
OU2MW-42I	30	25-30	-	-	-	-
OU2MW-42I2	50	45-50	-	-	-	-
OU2MW-42D	65	60-65	X	X	X	X
OU2MW-43S	15	5-15	-	-	-	-
OU2MW-43I	30	25-30	-	-	-	-
OU2MW-43I2	50	45-50	-	-	-	-
OU2MW-43D	70	65-70	X	X	X	X
OU2MW-44S	15	5-15	-	-	-	-
OU2MW-44I	30	25-30	-	-	-	-
OU2MW-44I2	50	45-50	-	-	-	-
OU2MW-44D	70	65-70	-	-	-	-
OU2MW-45S	15	5-15	-	-	-	-
OU2MW-45I	25	20-25	-	-	-	-
OU2MW-45I2	45	40-45	-	-	-	-
OU2MW-45D	60	55-60	-	-	-	-
OU2MW-46S	15	5-15	-	-	-	-
OU2MW-46I	25	20-25	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU2MW-46I2	45	40-45	-	-	-	-
OU2MW-47S	15	5-15	X	X	X	X
OU2MW-47I	25	20-25	X	X	X	X
OU2MW-47I2	45	40-45	X	X	X	X
OU2MW-47D	65	60-65	X	X	X	X
OU2MW-52S	8	3-8	-	-	-	-
OU2MW-52I	25	20-25	-	-	-	-
OU2MW-52D	40	35-40	-	-	-	-
OU2MW-53S	8	3-8	-	-	-	-
OU2MW-53I	25	20-25	-	-	-	-
OU2MW-53D	40	35-40	-	-	-	-
OU2MW-54S	15	5-15	-	-	-	-
OU2MW-54I	30	25-30	-	-	-	-
OU2MW-54I2	45	40-45	-	-	-	-
OU2MW-54D	65	60-65	-	-	-	-
OU2MW-55S	15	5-15	-	-	-	-
OU2MW-55I	35	30-35	-	-	-	-
OU2MW-55I2	55	50-55	-	-	-	-
OU2MW-55D	70	65-70	-	-	-	-
OU2MW-56S	15	5-15	-	-	-	-
OU2MW-56I	30	25-30	-	-	-	-
OU2MW-56I2	50	45-50	-	-	-	-
OU2MW-56D	70	65-70	-	-	-	-
OU2MW-58S	17	5-15	-	-	-	-
OU2MW-58I	32	25-30	-	-	-	-
			46	46	46	46

OU-3 Monitoring Wells

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
TMW-1I	17	12-17	-	X	X	X
TMW-1I2	30	25-30	X	X	X	X
TMW-2I	17	12-17	-	-	-	X
TMW-2I2	30	25-30	X	X	X	X
TMW-3I	17	12-17	X	X	X	X
TMW-3I2	30	25-30	X	X	X	X
BBMW-09S	15	5-15	-	-	-	-
BBMW-09I	40	30-40	-	-	-	-
BBMW-09D	72	62-72	-	-	-	-
BBMW-28S	12	2-12	-	-	-	-
BBMW-28I	20	10-20	-	-	-	-
BBMW-29	9	2-9	-	-	-	-
BBMW-30S	10	2-10	-	-	-	-
BBMW-30I	19	14-19	-	-	-	-
BBMW-30D	35	30-35	-	-	-	-
BBMW-31S	10	2-10	-	-	-	-
BBMW-31I	19	14-19	-	-	-	-
BBMW-31D	35	30-35	-	-	-	-
BBMW-32S	10	2-10	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
BBMW-32I	19	14-19	-	-	-	-
BBMW-32D	35	30-35	-	-	-	-
BBMW-33	12	7-12	-	-	-	-
BW-UST-10	9.95	4.65-9.95	-	-	-	-
BW-UST-11	9.4	4.4-9.4	-	-	-	-
BW-UST-28	10	5-10	-	-	-	-
BW-UST-29	10	5-10	-	-	-	-
GM-02AS		unknown	-	-	-	-
GM-02AI		unknown	-	-	-	-
GM-02AD		unknown	-	-	-	-
IO-10	16	6-16	-	-	-	-
MW-01S	14	4-14	-	-	-	-
MW-01D	45	35-45	-	-	-	-
MW-03	14.94	4.94-14.94	-	-	-	-
MW-04	15.1	4.1-15.1	-	-	-	-
MW-11W	10	2-10	-	-	-	-
MW-12W	10	25-30	-	-	-	-
MW-13W	10	2-10	-	-	-	-
MW-29S	10	5-10	-	-	-	-
MW-29D	19	14-19	-	-	-	-
MW-30W-R	9	2-9	-	-	-	-
MW-32WR	9	2-9	-	-	-	-
MW-33W			-	-	-	-
MW-34S	10	2-10	-	-	-	-
MW-34I	19.5	18.5-19.5	-	-	-	-
MW-34D	28.5	27.5-28.5	-	-	-	-
MW-34DD	40	unknown	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
MW-37W	10	2-10	-	-	-	-
MW-39W	10	2-10	-	-	-	-
MW-45W	10	2-10	-	-	-	-
MW-46W-R	10	2-10	-	-	-	-
MW-64	24	19-24	X	X	X	X
MW-65	16	11-16	X	X	X	X
MW-66S	11.5	1.5-11.5	-	-	-	-
MW-66D	29	24-29	-	-	-	-
MW-67S	12	2.5 - 12.5	-	-	-	-
MW-67D	28.5	24 - 29	-	-	-	-
MW-68S	19.5	unknown	-	-	-	-
MW-68D	30	25.0-30.0	-	-	-	-
MW-70/70S	12	2-12	-	-	-	-
MW-73	12	2-12	-	-	-	-
MW-73I	27	22-27	-	-	-	-
MW-75	12	2-12	-	-	-	-
MW-75I	27	22-27	-	-	-	-
MW-76	12	2-12	-	-	-	-
MW-78	20	5-20	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
MW-79	20	5-20	-	-	-	-
MW-80	20	5-20	-	-	-	-
MW-81	20	5-20	-	-	-	-
MW-82	20	5-20	-	-	-	-
MW-83	20	5-20	X	X	X	X
MW-BS-01S	unknown		-	-	-	-
MW-BS-02S	15	5-15	-	-	-	-
MW-BS-02I	15.5	14.5-15.5	-	-	-	-
MW-BS-02D	25.5	24.5-25.5	-	-	-	-
OU3MW-01S	13	3-13	-	-	-	-
OU3MW-02S	13	3-13	-	-	-	-
OU3MW-02I	20	15-20	-	-	-	-
OU3MW-03S	11	1-11	-	-	-	-
OU3MW-03I	25	20-25	-	-	-	-
OU3MW-04S	11	1-11	-	-	-	-
OU3MW-04I	21	16-21	-	-	-	-
OU3MW-04D	31	26-31	-	-	-	-
OU3MW-04D2	36	31-36	-	-	-	-
OU3MW-04D3	46	41-46	-	-	-	-
OU3MW-05S	12	2-12	-	-	-	-
OU3MW-05I	20	15-20	-	-	-	-
OU3MW-06	13	3-13	-	-	-	-
OU3MW-07S	13	3-13	X	X	X	X
OU3MW-07I	20	15-20	X	X	X	X
OU3MW-07I2	25	20-25	X	X	X	X
OU3MW-07I3	30	25-30	X	X	X	X
OU3MW-07I4	40	30-35	X	X	X	X

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU3MW-08S	12	2-12	X	X	X	X
OU3MW-08I	30	25-30	-	-	-	-
OU3MW-09S	12	2-12	-	-	-	-
OU3MW-09I	30	25-30	X	X	X	X
OU3MW-09I2	40	35-40	-	-	-	-
OU3MW-10S	12	2-12	-	-	-	-
OU3MW-10I	30	25-30	X	X	X	X
OU3MW-11S	12	2-12	-	-	-	-
OU3MW-11I	30	25-30	-	-	-	-
OU3MW-12S	12	2-12	-	-	-	-
OU3MW-12I	30	25-30	-	-	-	-
OU3MW-13S	12	2-12	-	-	X	X
OU3MW-14S	12	2-12	-	-	-	-
OU3MW-15S	12	2-12	-	-	-	-
OU3MW-16S	12	2-12	X	X	X	X
OU3MW-17S	12	2-12	-	-	-	-
OU3MW-17I	20	15-20	-	-	-	-
OU3MW-17I2	30	25-30	-	-	-	-
OU3MW-18I	20	15-20	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
OU3MW-18I2	30	25-30	-	-	-	-
OU3MW-19S	12	2-12	X	X	X	X
OU3MW-19I	25	20-25	X	X	X	X
OU3MW-19I2	35	30-35	X	X	X	X
OU3MW-20S	12	2-12	X	X	X	X
OU3MW-20I	25	20-25	X	X	X	X
OU3MW-20I2	35	30-35	X	X	X	X
OU3MW-21S	12	2-12	-	-	-	-
OU3MW-21I	20	15-20	-	-	-	-
OU3MW-21I2	30	25-30	-	-	-	-
OU3MW-22I/IP-15A	15	10-15	-	-	-	-
OU3MW-22I2/IP-15B	30	25-30	-	-	-	-
OU3MW-23I/IP-17B	15	10-15	-	-	X	X
OU3MW-23I2/IP-17A	30	25-30	-	-	-	-
OU3MW-24I/IP-19A	15	10-15	-	-	-	-
OU3MW-24I2/IP-19B	30	25-30	X	X	X	X
IP-16A	15	14-15	-	-	-	X
IP-16B	30	29-30	-	-	-	-
IP-18A	15	14-15	-	-	-	-
IP-18B	30	29-30	-	-	-	-
IP-20A	15	14-15	-	-	-	X
IP-20B	30	29-30	X	X	X	X
PDMW-01	20	5-20	-	-	-	-
SV-02	12	2-12	-	-	-	-
SV-02I	27	22-27	-	-	-	-
SV-02I2	40	35-40	-	-	-	-
SV-03	12	2-12	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
			20	20	22	24
<i>OU-4 Monitoring Wells</i>						
WCMW-02S	13	3-13	-	-	-	-
WCMW-02I	43.5	34.5-43.5	-	-	-	-
WCMW-02D	72	62-72	-	-	-	-
WCMW-04S	11.6	1.6-11.6	-	-	-	-
WCMW-04I	24	19-24	-	-	-	-
WCMW-04I2	34.85	29.85-34.85	-	-	-	-
WCMW-05S	11.15	1.15-11.15	-	-	-	-
WCMW-05I	24.61	19.61-24.61	X	X	X	X
WCMW-05I2	34.96	29.46-34.96	X	X	X	X
WCMW-06S	12	2-12	-	-	-	-
WCMW-06I	24.55	19.55-24.55	-	-	-	-
WCMW-06I2	34.83	29.83-34.83	-	-	-	-
WCMW-07S	12.76	2.76-12.76	-	-	-	-
WCMW-07I	23.9	18.9-23.9	-	-	-	-
WCMW-07I2	33.95	28.95-33.95	-	-	-	-
WCMW-08S	19.2	4.2-19.2	-	-	-	-
WCMW-08I	24.2	19.2-24.2	-	-	-	-

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
WCMW-08I2	31.9	26.9-31.9	-	-	-	-
WCMW-10S	20	15-20	-	-	-	-
WCMW-10D	50	40-50	-	-	-	-
WCMW-11S	15	5-15	-	-	-	X
WCMW-11I	35	25-35	-	-	-	X
WCMW-11D	60	50-60	-	-	-	-
WCMW-12S	13	3-13	-	-	-	-
WCMW-12I	30	25-30	-	-	-	-
WCMW-12D	72	67-72	-	-	-	-
WCMW-13S	13	3-13	-	-	-	-
WCMW-13I	30	25-30	-	-	-	-
WCMW-13D	70	65-70	-	-	-	-
WCMW-14S	12	2-12	-	-	-	X
WCMW-14I	25	20-25	-	-	-	-
WCMW-14I2	35	30-35	-	-	-	-
WCMW-14D	72	67-72	-	-	-	-
WCMW-19S	12	2-12	-	-	-	-
WCMW-19I	25	20-25	-	-	-	-
WCMW-19I2	35	30-35	-	-	-	-
WCMW-22S	12	2-12	-	-	-	-
WCMW-22I	30	25-30	-	-	-	-
WCMW-23S	12	2-12	-	-	-	-
WCMW-23I	30	25-30	-	-	-	-
WCMW-25I	35	30-35	-	-	-	-
WCMW-25D	60	55-60	-	-	-	-
WCMW-26S	12	2-12	-	-	-	X
WCMW-26I	25	20-25	-	-	-	X

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Sample Location Designation	Total Depth (ft bgs)	Well Screen Interval (ft bgs)	Q3 2021	Q4 2021	Q1 2022	Q2 2022
WCMW-26I2	35	30-35	-	-	-	-
WCMW-29S	25	2-12	-	-	-	X
WCMW-29I	25	20-25	-	-	-	X
WCMW-30S	12	2-12	-	-	-	-
WCMW-30I	25	20-25	X	X	X	X
WCMW-30I2	35	30-35	-	-	-	-
WCMW-31S	12	2-12	-	-	-	-
WCMW-31I	25	20-25	-	-	-	-
WCMW-31I2	35	30-35	-	-	-	-
WCMW-32S	12	2-12	X	-	-	X
TOTALS			4	3	3	11
			127	127	130	144

Notes:

*: Monitoring well not sampled if NAPL is present
NAPL= Non-aqueous Phase Liquid

Appendix B

OU-1 Oxygen Injection System Operational Data

Weight of Oxygen Injected through Q3 2021 762,420 lbs

		10/26/2021											11/24/2021											12/13/2021										
		85.6											84.6											87.2										
		10.73											10.73											10.73										
		645											620											650										
		Temp R (T)											Temp R (T)											Temp R (T)										
		SCFH (M)											SCFH (M)											SCFH (M)										
		CFD (V)											CFD (V)											CFD (V)										
		PSI (M)											PSI (M)											PSI (M)										
		PSI (P)											PSI (P)											PSI (P)										
		n=PV/RT (b Moles)											n=PV/RT (b Moles)											n=PV/RT (b Moles)										
		Temperature = Degress Rankine											Temperature = Degress Rankine											Temperature = Degress Rankine										
		R = Constant (10.73)											R = Constant (10.73)											R = Constant (10.73)										
		Total Oxygen Injected Per Day (lb)											Total Oxygen Injected Per Day (lb)											Total Oxygen Injected Per Day (lb)										
	Injection Bank 1	0.000											18.843											13.316										
	Injection Bank 2	24.600											34.419											32.289										
	Injection Bank 3	11.906											18.719											16.673										
	Injection Bank 4	14.993											26.457											17.706										
	Injection Bank 5	19.331											28.863											22.658										
	Injection Bank 6	21.772											30.395											22.295										
	Injection Bank 7	13.689											28.532											19.342										
	Injection Bank 8	16.401											27.022											21.343										
	System Total Per Day (lb)	192.69											192.41											153.71										

Oxygen to OU-1 Union Boulevard			Oxygen Injected Per Month (lbs)
Operational Days	1	123	
Month 1	Nov-21	29	5,580
Month 2	Dec-21	30	4,611
Month 3	Dec-21	30	4,611
Total Operational Days in Q4 2021			60
Total Oxygen in Q4 2021 (lbs)			10,313.68
Running Total for Oxygen to OU-1 Union Boulevard after Reconfiguration Through Q4 2021 (lbs)			772,733.68

- Notes:
- SCFH (M) = Measured flow rate
- SCFH (C*) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CFD (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSI (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (b Moles)
- Ibs = n*32 lb/b mole
- Temperature = Degress Rankine
- R = Constant (10.73)

System Operating Specs

Total of 8 injection banks
 Total of 18 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 3 injection cycles per day
 Each injection point injects oxygen for 30 min per day (13 min per cycle * 3 cycles)

Example

Bank 2 starts injection at 700AM
 Bank 2 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 3 starts injection at 800AM
 Bank 3 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 4 starts injection at 900AM
 Bank 4 finishes injection at 913AM
 System is recharging from 913AM to 1000AM
 Bank 5 starts injection at 1000AM
 Bank 5 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 6 starts injection at 1100AM
 Bank 6 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 7 starts injection at 1213PM
 System is recharging from 1213PM to 100PM
 Bank 8 starts injection at 100PM
 Bank 8 finishes injection at 113PM
 System is recharging from 113PM to 200PM
 (Keep repeating cycle for course of day)

System Downtime

7/22/21-10/30/21 - Refrigerated dryer failed
 1600-1200
 11/10/21-11/12/21 - Booster pump tubing leaking
 2340-1200
 12/6/21-12/7/21 - Sewer outage
 0600-0900

Weight of Oxygen Injected through Q1 2022 783,144 lbs

		5/5/2022										5/20/2022										6/16/2022																
		86.3										97.2										88.3																
		691										611										622																
		Temp R (T)																																				
Injection Bank	Point	Date	SCFH (M)		SCFH (C)		CFD (V)		PSI (M)		PSI (P)		n=PV/RT lbs/O2		SCFH (M)		SCFH (C)		CFD (V)		PSI (M)		PSI (P)		n=PV/RT lbs/O2		SCFH (M)		SCFH (C)		CFD (V)		PSI (M)		PSI (P)		n=PV/RT lbs/O2	
			Injection Bank 1	Point 51	15	30	28.981	18.837	0.5	15.2	0.036	28	27.490	17.868	1.0	15.7	0.042	32	31.417	20.421	1.0	15.7	0.040	35	42.219	27.442	9.0	23.7	0.082	35	42.219	27.442	9.0	23.7	0.082	35	42.219	27.442
Total Oxygen Injected Per Day (lb)		13,625										16,212										15,612																
Total Oxygen Injected Per Day (lb)		13,625										16,212										15,612																
Total Oxygen Injected Per Day (lb)		33,125										38,872										34,957																
System Total Per Day (lb)		127.84										190.03										169.88																

Oxygen to OU-1 Union Boulevard			
Operational Days	Oxygen Injected Per Month (lbs)		
Month 1	April-22	30	3,835
Month 2	May-22	31	5,891
Month 3	Jun-22	30	5,096
Total Operational Days in Q2 2022		91	
Total Oxygen in Q2 2022 (lbs)			14,822.53
Running Total for Oxygen to OU-1 Union Boulevard after Reconfiguration Through Q2 2022 (lbs)			797,966.36

Notes:
 SCFH (M) = Measured flow rate
 SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
 CFD (V) = Volume of oxygen injected per day
 PSI (M) = Measured pressure
 PSIa (P) = Pressure converted to atmospheric pressure
 n = n=PV/RT = (lb Moles)
 lbs = n*32 lb/lb mole
 Temperature = Degrees Rankine
 R = Constant (10.73)

System Operating Specs
 Total of 8 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 3 injection cycles per day
 Each injection point injects oxygen for 30 min per day (13 min per cycle * 3 cycles)

Example
 Bank 2 starts injection at 700AM
 Bank 2 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 3 starts injection at 800AM
 Bank 3 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 4 starts injection at 900AM
 Bank 4 finishes injection at 913AM
 System is recharging from 913AM to 1000AM
 Bank 5 starts injection at 1000AM
 Bank 5 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 6 starts injection at 1100AM
 Bank 6 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 7 starts injection at 1200PM
 Bank 7 finishes injection at 1213PM
 System is recharging from 1213PM to 100PM
 Bank 8 starts injection at 100PM
 Bank 8 finishes injection at 113PM
 System is recharging from 113PM to 200PM
 (Keep repeating cycle for course of day)

System Downtime Days/Hours

Weight of Oxygen Injected through Q2 2021 301,967 lbs

Oxygen to OU-1 North			
Operational Days		Oxygen Injected Per Month (lbs)	
Month 1	Jul-21	31	3,143
Month 2	Aug-21	31	3,331
Month 3	Sep-21	30	4,052

Total Operational Days in Q3 2021 92
Total Oxygen in Q3 2021 (lbs) 10,526.68

Running Total for Oxygen to OU-1 North Through Q3 2021 (lbs) 312,493.68

7/21/2021													8/9/2021													9/8/2021												
85.2													83.6													94.3												
10.73													10.73													10.73												
620													668													613												
Injection Bank	Point	Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n=PV/RT lbs O2	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n=PV/RT lbs O2	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n=PV/RT lbs O2	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n=PV/RT lbs O2												
Injection Bank 1	Point 1A	10.5	31	29.947	25.954	0.5	15.2	0.051	30	29.453	25.526	1.0	15.7	0.047	32	32.402	28.082	2.0	16.7	0.067																		
	Point 1B	25.5	29	34.235	29.671	8.0	22.7	0.086	35	41.319	35.809	8.0	22.7	0.095	35	41.771	36.202	8.5	23.2	0.120																		
	Point 1C	40.5	27	36.151	31.331	14.5	29.2	0.117	30	40.168	34.812	14.5	29.2	0.119	38	51.313	44.471	15.0	29.7	0.189																		
	Point 1D	50.5	30	42.507	36.839	18.0	32.7	0.154	30	42.831	37.120	18.5	33.2	0.144	40	57.536	49.885	19.0	33.7	0.241																		
	Point 2A	10.5	10	9.500	8.233	0.0	14.7	0.016	12	11.400	9.890	0.0	14.7	0.017	19	18.949	16.422	1.5	16.2	0.038																		
	Point 2B	25.5	27	31.521	27.319	7.5	22.2	0.078	30	34.627	30.010	7.0	21.7	0.076	69	80.555	69.814	7.5	22.2	0.222																		
Total Oxygen Injected Per Day (lb)			16.045									15.896									28.105																	
Injection Bank 2	Point 2C	40.5	25	33.473	29.010	14.5	29.2	0.108	26	34.812	30.170	14.5	29.2	0.103	0	0.000	0.000	15.0	29.7	0.000																		
	Point 2D	50.5	30	43.152	37.398	19.0	33.7	0.161	31	44.590	38.645	19.0	33.7	0.152	25	35.960	31.165	19.0	33.7	0.151																		
	Point 3A	10.5	10	9.500	8.233	0.0	14.7	0.016	20	19.000	16.467	0.0	14.7	0.028	21	19.950	17.290	0.0	14.7	0.036																		
	Point 3B	25.5	11	13.128	11.378	8.5	23.2	0.034	37	43.680	37.856	8.0	22.7	0.100	22	25.972	22.509	8.0	22.7	0.073																		
	Point 3C	40.5	20	26.779	23.208	14.5	29.2	0.087	35	46.862	40.614	14.5	29.2	0.138	28	37.490	32.491	14.5	29.2	0.136																		
	Point 3D	50.5	14	21.015	18.213	22.0	36.7	0.086	35	52.537	45.532	22.0	36.7	0.195	24	36.025	31.222	22.0	36.7	0.164																		
Total Oxygen Injected Per Day (lb)			15.731									22.923									17.938																	
Injection Bank 3	Point 4A	10.5	31	33.216	28.787	4.0	18.7	0.069	29	31.486	27.288	4.5	19.2	0.061	30	32.571	28.229	4.5	19.2	0.078																		
	Point 4B	25.5	30	35.804	31.030	8.5	23.2	0.092	27	32.223	27.927	8.5	23.2	0.076	29	34.610	29.996	8.5	23.2	0.100																		
	Point 4C	40.5	35	46.862	40.614	14.5	29.2	0.152	30	40.168	34.812	14.5	29.2	0.119	26	34.812	30.170	14.5	29.2	0.126																		
	Point 4D	50.5	30	43.471	37.675	19.5	34.2	0.165	32	46.029	39.892	19.0	33.7	0.157	33	46.166	41.744	20.0	34.7	0.208																		
	Point 5A	10.5	10	9.500	8.233	0.0	14.7	0.016	10	9.500	8.233	0.0	14.7	0.014	10	9.973	8.643	1.5	16.2	0.020																		
	Point 5B	25.5	25	29.186	25.295	7.5	22.2	0.072	27	31.521	27.319	7.5	22.2	0.071	28	32.689	28.330	7.5	22.2	0.090																		
Total Oxygen Injected Per Day (lb)			18.095									15.900									19.894																	
Injection Bank 4	Point 5C	40.5	40	54.466	47.204	15.5	30.2	0.183	30	41.187	35.695	16.0	30.7	0.128	31	42.559	36.885	16.0	30.7	0.162																		
	Point 5D	50.5	29	41.714	36.152	19.0	33.7	0.156	30	43.152	37.398	19.0	33.7	0.147	31	44.520	38.931	19.5	34.2	0.191																		
	Point 6A	10.5	29	30.231	26.200	3.0	17.7	0.059	30	32.145	27.859	4.0	18.7	0.061	39	40.077	34.733	2.5	17.2	0.086																		
	Point 6B	25.5	27	31.521	27.319	7.5	22.2	0.078	31	36.191	31.966	7.5	22.2	0.081	32	37.359	32.738	7.5	22.2	0.103																		
	Point 6C	40.5	27	36.151	31.331	14.5	29.2	0.117	30	40.168	34.812	14.5	29.2	0.119	32	42.846	37.133	14.5	29.2	0.155																		
	Point 6D	50.5	29	40.775	35.338	17.5	32.2	0.146	29	40.775	35.338	17.5	32.2	0.133	29	41.090	35.611	18.0	32.7	0.167																		
Total Oxygen Injected Per Day (lb)			23.634									21.378									27.659																	
Injection Bank 5	Point 7A	10.5	10	9.500	8.233	0.0	14.7	0.016	25	23.750	20.583	0.0	14.7	0.035	10	9.818	8.509	1.0	15.7	0.019																		
	Point 7B	25.5	21	24.517	21.248	7.5	22.2	0.060	30	35.024	30.354	7.5	22.2	0.079	32	37.777	32.740	8.0	22.7	0.107																		
	Point 7C	40.5	30	40.850	35.403	15.5	30.2	0.137	30	40.850	35.403	15.5	30.2	0.125	29	39.814	34.505	16.0	30.7	0.152																		
	Point 7D	50.5	21	29.981	25.984	18.5	33.2	0.110	30	42.831	37.120	18.5	33.2	0.144	36	51.397	44.544	18.5	33.2	0.212																		
	Point 8A	10.5	21	21.891	18.972	3.0	17.7	0.043	31	32.316	28.007	3.0	17.7	0.058	30	30.828	26.718	2.5	17.2	0.066																		
	Point 8B	25.5	37	42.707	37.013	7.0	21.7	0.103	30	34.627	30.010	7.0	21.7	0.076	30	34.627	30.010	7.0	21.7	0.093																		
	Point 8C	40.5	21	27.632	23.948	13.5	28.2	0.086	26	33.906	29.385	13.0	27.7	0.095	32	42.106	36.491	13.5	28.2	0.148																		
Point 8D	50.5	25	35.960	31.165	19.0	33.7	0.135	30	43.471	37.675	19.5	34.2	0.150	34	49.267	42.698	19.5	34.2	0.209																			
Total Oxygen Injected Per Day (lb)			22.086									24.362									32.183																	
Injection Bank 6	Point 9A	10.5	0	0.000	0.000	0.0	14.7	0.000	15	14.250	12.350	0.0	14.7	0.021	18	17.100	14.820	0.0	14.7	0.031																		
	Point 9B	25.5	25	29.513	25.578	8.0	22.7	0.074	29	34.610	29.996	8.5	23.2	0.081	32	39.005	33.805	9.5	24.2	0.117																		
	Point 9C	40.5	26	34.211	29.649	13.5	28.2	0.107	31	40.790	35.351	13.5	28.2	0.116	30	39.822	34.513	14.0	28.7	0.142																		
Total Oxygen Injected Per Day (lb)			5.806									6.996									9.297																	
System Total Per Day (lb)			101.40									107.46									135.08																	

Notes:
SCFH (M) = Measured flow rate
SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
CF/D (V) = Volume of oxygen injected per day
PSI (M) = Measured pressure
PSia (P) = Pressure converted to atmospheric pressure
n = PV/RT = (lb Moles)
lbs = n*32 lb/lb mole
Temperature = Degrees Rankine
R = Constant (10.73)

System Operating Specs
Total of 6 injection banks
Oxygen is injected for 13 minutes during each injection cycle
Each injection bank operates for 4 injection cycles per day
Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example
Bank 1 starts injection at 700AM
Bank 1 finishes injection at 713AM
System is recharging 713AM to 800AM
Bank 2 starts injection at 800AM
Bank 2 finishes injection at 813AM
System is recharging 813AM to 900AM
Bank 3 starts injection at 900AM
Bank 3 finishes injection at 913AM
System is recharging from 913AM to 1000AM
Bank 4 starts injection at 1000AM
Bank 4 finishes injection at 1013AM
System is recharging from 1013AM to 1100AM
Bank 5 starts injection at 1100AM
Bank 5 finishes injection at 1113AM
System is recharging from 1113AM to 1200PM
Bank 6 starts injection at 1200PM
Bank 6 finishes injection at 1213PM
System is recharging from 1213PM to 100PM
(Keep repeating cycle for course of day)

System Downtime
7/8/21 - Power outage
1310-1400

Weight of Oxygen Injected through Q3 2021 312,494 lbs

Oxygen to OU-1 North			
Operational Days		Oxygen Injected Per Month (lbs)	
Month 1	Oct-21	31	3,586
Month 2	Nov-21	23	2,571
Month 3	Dec-21	0	0
Total Operational Days in Q4 2021		54	
Total Oxygen in Q4 2021 (lbs)		6,156.39	
Running Total for Oxygen to OU-1 North Through Q4 2021 (lbs)		318,650.39	

Notes:

- SCFH (M) = Measured flow rate
- SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CF/D (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSIa (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (lb Moles)
- lbs = n*32 lb/lb mole
- Temperature = Degrees Rankine
- R = Constant (10.73)

System Operating Specs

- Total of 6 injection banks
- Oxygen is injected for 13 minutes during each injection cycle
- Each Injection bank operates for 4 injection cycles per day
- Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example

- Bank 1 starts injection at 700AM
- Bank 1 finishes injection at 713AM
- System is recharging 713AM to 800AM
- Bank 2 starts injection at 800AM
- Bank 2 finishes injection at 813AM
- System is recharging 813AM to 900AM
- Bank 3 starts injection at 900AM
- Bank 3 finishes injection at 913AM
- System is recharging from 913AM to 1000AM
- Bank 4 starts injection at 1000AM
- Bank 4 finishes injection at 1013AM
- System is recharging from 1013AM to 1100AM
- Bank 5 starts injection at 1100AM
- Bank 5 finishes injection at 1113AM
- System is recharging from 1113AM to 1200PM
- Bank 6 starts injection at 1200PM
- Bank 6 finishes injection at 12113M
- System is recharging from 1213PM to 100PM
- (Keep repeating cycle for course of day)

System Downtime

- 11/24/21 Compressor sensor failed

		10/12/2021							11/10/2021						
		84.6							85.7						
		10.73							10.73						
		636							632						
		Temp R (T)													
	Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	n=PV/RT lbs O2	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	n=PV/RT lbs O2		
		Injection Bank 1	Point 1A	10.5	30	29.453	25.526	1.0	15.7	0.050	26	26.718	23.156	2.5	17.2
	Point 1B	25.5	31	36.597	31.717	8.0	22.7	0.089	30	35.416	30.694	8.0	22.7	0.088	
	Point 1C	40.5	30	40.168	34.812	14.5	29.2	0.126	30	40.168	34.812	14.5	29.2	0.128	
	Point 1D	50.5	31	44.590	38.645	19.0	33.7	0.161	30	42.831	37.120	18.5	33.2	0.156	
	Point 2A	10.5	17	16.150	13.997	0.0	14.7	0.026	5	4.986	4.322	1.5	16.2	0.009	
	Point 2B	25.5	30	34.627	30.010	7.0	21.7	0.081	28	33.055	28.648	8.0	22.7	0.082	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		17.045							16.436						
Injection Bank 2	Point 2C	40.5	12	16.067	13.925	14.5	29.2	0.050	27	36.459	31.598	15.0	29.7	0.119	
	Point 2D	50.5	31	44.590	38.645	19.0	33.7	0.161	30	43.152	37.398	19.0	33.7	0.159	
	Point 3A	10.5	10	9.500	8.233	0.0	14.7	0.015	5	4.750	4.117	0.0	14.7	0.008	
	Point 3B	25.5	31	36.597	31.717	8.0	22.7	0.089	28	33.055	28.648	8.0	22.7	0.082	
	Point 3C	40.5	31	41.507	35.972	14.5	29.2	0.130	29	38.829	33.652	14.5	29.2	0.124	
	Point 3D	50.5	30	44.724	38.761	21.5	36.2	0.174	30	45.032	39.028	22.0	36.7	0.181	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		19.849							21.533						
Injection Bank 3	Point 4A	10.5	30	32.993	28.594	5.0	19.7	0.070	33	36.292	31.453	5.0	19.7	0.078	
	Point 4B	25.5	30	35.416	30.694	8.0	22.7	0.086	31	36.997	32.064	8.5	23.2	0.094	
	Point 4C	40.5	30	40.168	34.812	14.5	29.2	0.126	37	49.540	42.935	14.5	29.2	0.158	
	Point 4D	50.5	31	44.920	38.931	19.5	34.2	0.165	29	42.328	36.684	20.0	34.7	0.161	
	Point 5A	10.5	30	28.500	24.700	0.0	14.7	0.045	5	4.750	4.117	0.0	14.7	0.008	
	Point 5B	25.5	31	36.191	31.366	7.5	22.2	0.086	37	44.158	38.270	8.5	23.2	0.112	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		18.516							19.567						
Injection Bank 4	Point 5C	40.5	31	42.559	36.885	16.0	30.7	0.140	27	37.068	32.126	16.0	30.7	0.125	
	Point 5D	50.5	31	44.590	38.645	19.0	33.7	0.161	29	42.022	36.419	19.5	34.2	0.157	
	Point 6A	10.5	31	32.316	28.007	3.0	17.7	0.061	28	29.598	25.651	3.5	18.2	0.059	
	Point 6B	25.5	31	36.191	31.366	7.5	22.2	0.086	29	33.856	29.342	7.5	22.2	0.082	
	Point 6C	40.5	30	40.168	34.812	14.5	29.2	0.126	30	39.822	34.513	14.0	28.7	0.125	
	Point 6D	50.5	31	43.587	37.775	17.5	32.2	0.151	27	38.256	33.155	18.0	32.7	0.137	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		23.245							21.938						
Injection Bank 5	Point 7A	10.5	27	25.650	22.230	0.0	14.7	0.041	5	4.909	4.254	1.0	15.7	0.008	
	Point 7B	25.5	30	35.024	30.354	7.5	22.2	0.084	30	35.416	30.694	8.0	22.7	0.088	
	Point 7C	40.5	31	42.559	36.885	16.0	30.7	0.140	29	39.488	34.223	15.5	30.2	0.131	
	Point 7D	50.5	40	56.676	49.119	18.0	32.7	0.199	31	43.924	38.067	18.0	32.7	0.157	
	Point 8A	10.5	31	32.316	28.007	3.0	17.7	0.061	32	33.358	28.910	3.0	17.7	0.065	
	Point 8B	25.5	30	34.627	30.010	7.0	21.7	0.081	26	30.010	26.009	7.0	21.7	0.071	
	Point 8C	40.5	32	41.731	36.167	13.0	27.7	0.124	30	39.474	34.211	13.5	28.2	0.122	
Point 8D	50.5	35	50.344	43.631	19.0	33.7	0.182	25	35.682	30.933	18.5	33.2	0.130		
Total Oxygen Injected Per Day (lb)		29.191							24.708						
Injection Bank 6	Point 9A	10.5	12	11.400	9.880	0.0	14.7	0.018	12	11.400	9.880	0.0	14.7	0.018	
	Point 9B	25.5	37	43.196	37.437	7.5	22.2	0.103	31	36.191	31.366	7.5	22.2	0.088	
	Point 9C	40.5	31	40.790	35.351	13.5	28.2	0.124	33	43.035	37.297	13.0	27.7	0.131	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		7.828							7.581						
System Total Per Day (lb)		115.67							111.76						

Weight of Oxygen Injected through Q1 2022

326,330 lbs

Oxygen to OU-1 North			
Operational Days		Oxygen Injected Per Month (lbs)	
Month 1	Apr-22	28	3,210
Month 2	May-22	31	2,392
Month 3	Jun-22	3	231
Total Operational Days in Q2 2022		62	
Total Oxygen in Q2 2022 (lbs)		5,833.14	
Running Total for Oxygen to OU-1 North Through Q2 2022 (lbs)		332,163.14	

Notes:

- SCFH (M) = Measured flow rate
- SCFH (C*) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CF/D (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSIa (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (lb Moles)
- lbs = n*32 lb/lb mole
- Temperature = Degrees Rankine
- R = Constant (10.73)

System Operating Specs

- Total of 6 injection banks
- Oxygen is injected for 13 minutes during each injection cycle
- Each Injection bank operates for 4 injection cycles per day
- Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example

- Bank 1 starts injection at 700AM
- Bank 1 finishes injection at 713AM
- System is recharging 713AM to 800AM
- Bank 2 starts injection at 800AM
- Bank 2 finishes injection at 813AM
- System is recharging 813AM to 900AM
- Bank 3 starts injection at 900AM
- Bank 3 finishes injection at 913AM
- System is recharging from 913AM to 1000AM
- Bank 4 starts injection at 1000AM
- Bank 4 finishes injection at 1013AM
- System is recharging from 1013AM to 1100AM
- Bank 5 starts injection at 1100AM
- Bank 5 finishes injection at 1113AM
- System is recharging from 1113AM to 1200PM
- Bank 6 starts injection at 1200PM
- Bank 6 finishes injection at 12113M
- System is recharging from 1213PM to 100PM
- (Keep repeating cycle for course of day)

4/19/2022										6/2/2022					
O ₂ %										94.7					
Temp R (T)										10.73					
663										645					
Injection Bank	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	n=PV/RT lbs O ₂	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	n=PV/RT lbs O ₂	
			Injection Bank 1	Point 1A	10.5	30	30.377	26.327	2.0	16.7	0.059	21	21.264	18.429	2.0
Point 1B	25.5	32		37.777	32.740	8.0	22.7	0.099	20	23.611	20.463	8.0	22.7	0.063	
Point 1C	40.5	29		39.160	33.939	15.0	29.7	0.134	23	30.795	26.689	14.5	29.2	0.105	
Point 1D	50.5	28		39.975	34.645	18.5	33.2	0.153	20	28.554	24.747	18.5	33.2	0.111	
Point 2A	10.5	11		10.970	9.508	1.5	16.2	0.021	16	15.957	13.829	1.5	16.2	0.030	
Point 2B	25.5	33		38.526	33.389	7.5	22.2	0.099	22	25.393	22.007	7.0	21.7	0.064	
-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)			18.046						13.250						
Injection Bank 2	Point 2C	40.5	28	37.810	32.768	15.0	29.7	0.130	24	32.134	27.850	14.5	29.2	0.110	
	Point 2D	50.5	27	38.837	33.659	19.0	33.7	0.151	19	27.330	23.686	19.0	33.7	0.107	
	Point 3A	10.5	10	9.500	8.233	0.0	14.7	0.016	10	9.500	8.233	0.0	14.7	0.016	
	Point 3B	25.5	27	31.874	27.624	8.0	22.7	0.083	16	18.889	16.370	8.0	22.7	0.050	
	Point 3C	40.5	28	37.490	32.491	14.5	29.2	0.126	22	29.456	25.529	14.5	29.2	0.100	
	Point 3D	50.5	28	42.030	36.426	22.0	36.7	0.178	17	25.344	21.964	21.5	36.2	0.107	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)			21.900						15.706						
Injection Bank 3	Point 4A	10.5	26	28.594	24.781	5.0	19.7	0.065	20	21.430	18.572	4.0	18.7	0.047	
	Point 4B	25.5	29	34.610	29.996	8.5	23.2	0.093	20	23.611	20.463	8.0	22.7	0.063	
	Point 4C	40.5	24	32.134	27.850	14.5	29.2	0.108	12	16.067	13.925	14.5	29.2	0.055	
	Point 4D	50.5	26	37.949	32.889	20.0	34.7	0.152	26	37.675	32.652	19.5	34.2	0.150	
	Point 5A	10.5	10	9.973	8.643	1.5	16.2	0.019	22	21.940	19.015	1.5	16.2	0.041	
	Point 5B	25.5	24	28.019	24.283	7.5	22.2	0.072	10	11.542	10.003	7.0	21.7	0.029	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)			16.262						12.325						
Injection Bank 4	Point 5C	40.5	31	42.559	36.885	16.0	30.7	0.151	22	30.203	26.176	16.0	30.7	0.108	
	Point 5D	50.5	30	43.152	37.398	19.0	33.7	0.168	21	30.206	26.179	19.0	33.7	0.119	
	Point 6A	10.5	28	29.598	25.651	3.5	18.2	0.062	18	18.764	16.262	3.0	17.7	0.039	
	Point 6B	25.5	30	35.024	30.354	7.5	22.2	0.090	21	24.517	21.248	7.5	22.2	0.064	
	Point 6C	40.5	27	36.151	31.331	14.5	29.2	0.122	21	28.117	24.368	14.5	29.2	0.096	
	Point 6D	50.5	29	41.090	35.611	18.0	32.7	0.155	14	19.837	17.192	18.0	32.7	0.076	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)			23.909						16.027						
Injection Bank 5	Point 7A	10.5	25	24.545	21.272	1.0	15.7	0.044	10	9.500	8.233	0.0	14.7	0.016	
	Point 7B	25.5	25	29.513	25.578	8.0	22.7	0.077	11	12.986	11.254	8.0	22.7	0.034	
	Point 7C	40.5	26	35.403	30.683	15.5	30.2	0.123	24	32.680	28.323	15.5	30.2	0.115	
	Point 7D	50.5	28	39.975	34.645	18.5	33.2	0.153	12	17.132	14.848	18.5	33.2	0.066	
	Point 8A	10.5	27	28.541	24.735	3.5	18.2	0.060	10	10.571	9.161	3.5	18.2	0.022	
	Point 8B	25.5	27	31.521	27.319	7.5	22.2	0.081	26	30.010	26.009	7.0	21.7	0.076	
	Point 8C	40.5	28	36.842	31.930	13.5	28.2	0.120	14	18.421	15.965	13.5	28.2	0.061	
	Point 8D	50.5	25	35.960	31.165	19.0	33.7	0.140	17	24.453	21.192	19.0	33.7	0.096	
Total Oxygen Injected Per Day (lb)			25.553						15.601						
Injection Bank 6	Point 9A	10.5	22	20.900	18.113	0.0	14.7	0.035	10	9.500	8.233	0.0	14.7	0.016	
	Point 9B	25.5	29	37.818	32.776	13.0	27.7	0.121	15	17.708	15.347	8.0	22.7	0.047	
	Point 9C	40.5	29	38.158	33.070	13.5	28.2	0.124	16	21.053	18.246	13.5	28.2	0.069	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)			8.974						4.240						
System Total Per Day (lb)			114.65						77.15						

Appendix C

OU-2 Oxygen Injection System Operational Data

Weight of Oxygen Injected through Q2 2021 622,354 lbs

O ₂ %	7/28/2021
R	82.9
Temp R (T)	10.73
	628

Oxygen to OU-2 - 9 North Clinton			
Operational Days	Injected Per Month (lbs)		
Month 1	Jul-21	30	3,768
Month 2	--	0	0
Month 3	--	0	0
Total Operational Days in Q3 2021		30	
Total Oxygen in Q3 2021		3,767.60	
Running Total for Oxygen to 9 North Clinton Through Q3 2021 (lbs)		626,121.60	

Notes:

- SCFH (M) = Measured flow rate
- SCFH (C*) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CF/D (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSIa (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (lb Moles)
- lbs = n*32 lb/lb mole
- Temperature = Degrees Rankine
- R = Constant (10.73)

System Operating Specs

Total of 6 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 3.1 injection cycles per day
 Each injection point injects oxygen for 40 min per day (13 min per cycle * 3.1 cycles)

Example

Bank 1 starts injection at 700AM
 Bank 1 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 2 starts injection at 800AM
 Bank 2 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 3 starts injection at 900AM
 Bank 3 finishes injection at 913AM
 System is recharging from 913AM to 1000AM
 Bank 4 starts injection at 1000AM
 Bank 4 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 5 starts injection at 1100AM
 Bank 5 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 6 starts injection at 1200PM
 Bank 6 finishes injection at 1213PM
 System is recharging from 1213PM to 100PM
 (Keep repeating cycle for course of day)

** Due to the request of the property owner, the system will not inject during the hours of 800AM and 830AM and 1100AM and 400PM.
 The oxygen weights have been adjusted to incorporate this schedule.

System Downtime

4/8/21 - 7/9/21 - Power Outage
 1310-0745

	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	PV/RT lbs O		
Injection Bank 1	Point 1A	30	31	38,559	25,706	10.5	25.2	0.080	
	Point 7A	30	31	38,175	25,450	10.0	24.7	0.077	
	Point 7B	64	33	51,520	34,347	25.0	39.7	0.168	
	Point 13A	25	10	11,409	7,606	6.5	21.2	0.020	
	Point 13B	52	32	46,707	31,138	20.0	34.7	0.133	
	Point 19A	25	30	35,804	23,869	8.5	23.2	0.068	
	Point 19B	44	30	41,521	27,680	16.5	31.2	0.106	
		-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		20,862							
Injection Bank 2	Point 2A	32	31	39,317	26,211	11.5	26.2	0.084	
	Point 8A	45	30	41,852	27,901	17.0	31.7	0.109	
	Point 8B	64	29	45,275	30,183	25.0	39.7	0.147	
	Point 8C	25	35	40,861	27,241	7.5	22.2	0.074	
	Point 14A	25	32	38,191	25,461	8.5	23.2	0.073	
	Point 14B	52	30	43,471	28,981	19.5	34.2	0.122	
	Point 20A	25	35	40,861	27,241	7.5	22.2	0.074	
	Point 20B	42	31	42,559	28,373	16.0	30.7	0.107	
		-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		25,321							
Injection Bank 3	Point 3A	25	-	-	-	-	-	-	
	Point 3B	35	30	38,048	25,366	11.5	26.2	0.082	
	Point 9A	45	32	44,289	29,526	16.5	31.2	0.113	
	Point 9B	64	30	45,338	30,225	22.5	37.2	0.138	
	Point 9C	25	31	36,191	24,127	7.5	22.2	0.066	
	Point 15A	25	30	35,416	23,611	8.0	22.7	0.066	
	Point 15B	44	30	40,850	27,233	15.5	30.2	0.101	
	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		18,126							
Injection Bank 4	Point 4A	25	31	36,597	24,398	8.0	22.7	0.068	
	Point 4B	39	31	40,790	27,193	13.5	28.2	0.094	
	Point 10A	45	31	44,920	29,947	19.5	34.2	0.126	
	Point 10B	64	30	47,422	31,615	26.0	40.7	0.158	
	Point 10C	25	33	38,958	25,972	8.0	22.7	0.073	
	Point 16A	25	31	36,191	24,127	7.5	22.2	0.066	
	Point 16B	47	31	43,924	29,283	18.0	32.7	0.118	
	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		22,496							
Injection Bank 5	Point 5A	25	29	33,856	22,571	7.5	22.2	0.062	
	Point 5B	42	30	40,168	26,779	14.5	29.2	0.096	
	Point 11A	45	26	35,985	23,990	16.5	31.2	0.092	
	Point 11B	64	27	42,417	28,278	25.5	40.2	0.140	
	Point 17A	25	29	34,235	22,824	8.0	22.7	0.064	
	Point 17B	45	27	37,963	25,308	17.5	32.2	0.100	
	Point 21A	25	27	32,223	21,482	8.5	23.2	0.061	
	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		19,683							
Injection Bank 6	Point 6A	30	30	35,416	23,611	8.0	22.7	0.066	
	Point 6B	52	29	42,022	28,015	19.5	34.2	0.118	
	Point 12A	25	27	31,521	21,014	7.5	22.2	0.057	
	Point 12B	54	29	42,934	28,622	21.0	35.7	0.126	
	Point 18A	25	25	29,513	19,676	8.0	22.7	0.055	
	Point 18B	45	25	34,877	23,251	17.0	31.7	0.091	
	Point 21B	42	25	34,041	22,694	15.5	30.2	0.084	
	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		19,099							
System Total Per Day (lb)		125.59							

Weight of Oxygen Injected through Q2 2021 823,317 lbs

Oxygen to OU-2 - 34 North Clinton			
Operational Days	Injected Per Month (lbs)		
Month 1 Jul-21	31	7,238	
Month 2 Aug-21	31	6,965	
Month 3 Sep-21	30	7,766	
Total Operational Days in Q2 2021		92	
Total Oxygen in Q2 2021		21,968.76	
Running Total for Oxygen to 34 North Clinton Through Q2 2021 (lbs)		845,285.76	

Notes:

- SCFH (M) = Measured flow rate
- SCFH (C*) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CF/D (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSIa (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (lb Moles)
- lbs = n*32 lb/lb mole
- Temperature = Degrees Rankine
- R = Constant (10.73)

System Operating Specs

- Total of 6 injection banks
- Oxygen is injected for 13 minutes during each injection cycle
- Each injection bank operates for 4 injection cycles per day
- Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example

- Bank 1 starts injection at 700AM
- Bank 1 finishes injection at 713AM
- System is recharging 713AM to 800AM
- Bank 2 starts injection at 800AM
- Bank 2 finishes injection at 813AM
- System is recharging 813AM to 900AM
- Bank 3 starts injection at 900AM
- Bank 3 finishes injection at 913AM
- System is recharging from 913AM to 1000AM
- Bank 4 starts injection at 1000AM
- Bank 4 finishes injection at 1013AM
- System is recharging from 1013AM to 1100AM
- Bank 5 starts injection at 1100AM
- Bank 5 finishes injection at 1113AM
- System is recharging from 1113AM to 1200PM
- Bank 6 starts injection at 1200PM
- Bank 6 finishes injection at 1213PM
- System is recharging from 1213PM to 100PM
- (Keep repeating cycle for course of day)

System Downtime

None

7/23/2021										8/27/2021										9/17/2021									
O ₂ %										98.9										98.9									
Temp R (T)										10.73										10.73									
632										627										605									
Injection Bank	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	=PV/RT lbs C		SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	=PV/RT lbs C		SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	=PV/RT lbs C							
																								SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIa (P)	=PV/RT lbs C
Injection Bank 1	Point 1A	65	32	51.202	44.375	27.0	41.7	0.270		30	48.001	41.601	27.0	41.7	0.255		30	48.001	41.601	27.0	41.7	0.264							
	Point 1B	45	31	43.587	37.775	17.5	32.2	0.177		52	73.113	63.365	17.5	32.2	0.300		40	56.241	48.742	17.5	32.2	0.239							
	Point 2	30	30	38.768	33.599	12.5	27.2	0.133		50	66.371	57.521	14.0	28.7	0.243		34	44.339	38.427	13.0	27.7	0.162							
	Point 13A	65	31	48.092	41.679	24.5	39.2	0.238		30	46.540	40.335	24.5	39.2	0.232		30	46.540	40.335	24.5	39.2	0.241							
	Point 13B	45	34	46.678	40.454	16.0	30.7	0.181		30	41.187	35.695	16.0	30.7	0.161		32	43.932	38.075	16.0	30.7	0.178							
	Point 14	30	36	43.881	38.030	9.5	24.2	0.134		31	39.175	33.085	10.0	24.7	0.120		36	44.332	38.421	10.0	24.7	0.145							
Point 25A	45	36	50.222	43.526	17.0	31.7	0.201		30	41.852	36.272	17.0	31.7	0.169		34	47.432	41.108	17.0	31.7	0.199								
Point 25B	30	37	45.563	39.498	10.0	24.7	0.142		41	50.998	44.198	10.5	25.2	0.164		33	41.047	35.574	10.5	25.2	0.137								
Total Oxygen Injected Per Day (lb)			47.285									52.610									50.055								
Injection Bank 2	Point 3A	65	36	56.203	48.710	25.0	39.7	0.282		29	45.275	39.238	25.0	39.7	0.229		30	46.836	40.591	25.0	39.7	0.246							
	Point 3B	45	34	45.912	39.790	15.0	29.7	0.172		41	55.828	48.384	15.5	30.2	0.215		41	55.364	47.982	15.0	29.7	0.217							
	Point 4	30	40	49.754	43.120	10.5	25.2	0.158		46	57.217	49.588	10.5	25.2	0.184		42	52.241	45.276	10.5	25.2	0.174							
	Point 15A	65	33	50.537	43.799	23.5	38.2	0.244		29	44.701	38.741	24.0	38.7	0.220		30	45.943	39.871	23.5	38.2	0.232							
	Point 15B	45	38	52.593	45.580	16.5	31.2	0.207		31	42.905	37.184	16.5	31.2	0.171		31	42.905	37.184	16.5	31.2	0.177							
	Point 16	30	37	45.100	39.086	9.5	24.2	0.138		32	39.406	34.152	10.0	24.7	0.124		33	40.224	34.861	9.5	24.2	0.129							
Point 26A	45	36	50.222	43.526	17.0	31.7	0.201		33	46.037	39.899	17.0	31.7	0.186		32	44.642	38.690	17.0	31.7	0.187								
Point 26B	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Total Oxygen Injected Per Day (lb)			44.910									42.598									43.529								
Injection Bank 3	Point 5A	65	36	57.602	49.921	27.0	41.7	0.304		29	46.679	40.455	27.5	42.2	0.251		31	49.898	43.245	27.5	42.2	0.278							
	Point 5B	45	37	51.200	44.381	16.5	31.2	0.202		33	46.037	39.899	17.0	31.7	0.186		33	45.673	39.583	16.5	31.2	0.188							
	Point 6	30	41	48.332	42.408	8.5	23.2	0.143		31	36.997	32.064	8.5	23.2	0.109		29	34.610	29.996	8.5	23.2	0.106							
	Point 17A	65	36	55.848	48.402	24.5	39.2	0.277		30	46.836	40.591	25.0	39.7	0.237		30	46.540	40.335	24.5	39.2	0.241							
	Point 17B	45	44	60.897	52.777	16.5	31.2	0.240		31	42.905	37.184	16.5	31.2	0.171		30	41.521	35.985	16.5	31.2	0.171							
	Point 18	30	34	41.869	36.286	10.0	24.7	0.131		30	36.943	32.017	10.0	24.7	0.116		28	34.480	29.883	10.0	24.7	0.112							
Total Oxygen Injected Per Day (lb)			41.491									34.238									35.091								
Injection Bank 4	Point 7A	65	37	58.846	51.000	26.5	41.2	0.306		30	47.713	41.351	26.5	41.2	0.250		30	47.713	41.351	26.5	41.2	0.260							
	Point 7B	45	38	53.012	45.944	17.0	31.7	0.212		30	42.181	36.557	17.5	32.2	0.173		32	44.642	38.690	17.0	31.7	0.187							
	Point 9	30	47	58.461	50.666	10.5	25.2	0.186		30	37.684	32.659	11.0	25.7	0.123		30	37.684	32.659	11.0	25.7	0.128							
	Point 19A	65	29	45.559	39.485	25.5	40.2	0.231		31	49.003	42.469	26.0	40.7	0.254		31	49.003	42.469	26.0	40.7	0.263							
	Point 19B	45	49	68.358	59.244	17.0	31.7	0.274		33	46.399	40.212	17.5	32.2	0.190		31	43.247	37.481	17.0	31.7	0.181							
	Point 20	30	38	46.795	40.555	10.0	24.7	0.146		30	37.315	32.340	10.5	25.2	0.120		30	37.315	32.340	10.5	25.2	0.124							
Total Oxygen Injected Per Day (lb)			43.409									35.556									36.569								
Injection Bank 5	Point 9A	65	28	44.532	38.594	26.5	41.2	0.232		29	46.401	40.215	27.0	41.7	0.247		72	114.511	99.243	26.5	41.2	0.623							
	Point 9B	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	Point 10	30	31	38.175	33.085	10.0	24.7	0.119		30	37.315	32.340	10.5	25.2	0.120		48	59.109	51.228	10.0	24.7	0.193							
	Point 21A	65	29	45.275	39.238	25.0	39.7	0.227		27	42.417	36.762	25.5	40.2	0.217		64	100.544	87.138	25.5	40.2	0.534							
	Point 21B	45	28	38.753	33.586	16.5	31.2	0.153		30	41.852	36.272	17.0	31.7	0.169		76	105.185	91.161	16.5	31.2	0.433							
	Point 22	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Total Oxygen Injected Per Day (lb)			23.395									24.083									57.046								
Injection Bank 6	Point 11A	65	31	49.003	42.469	26.0	40.7	0.252		30	47.422	41.099	26.0	40.7	0.246		29	45.842	39.729	26.0	40.7	0.246							
	Point 11B	45	20	27.680	23.990	16.5	31.2	0.109		30	41.852	36.272	17.0	31.7	0.169		30	41.852	36.272	17.0	31.7	0.175							
	Point 12	30	30	37.315	32.340	10.5	25.2	0.119		30	37.315	32.340	10.5	25.2	0.120		31	38.559	33.418	10.5	25.2	0.128							
	Point 23	65	29	45.842	39.729	26.0	40.7	0.236		30	47.713	41.351	26.5	41.2	0.250		30	47.422	41.099	26.0	40.7	0.255							
	Point 24A	55	30	44.724	38.761	21.5	36.2	0.205		30	44.724	38.761	21.5	36.2	0.206		30	44.724	38.761	21.5	36.2	0.214							
	Point 24B	30	28	34.828	30.184	10.5	25.2	0.111		30	37.684	32.659	11.0	25.7	0.123		30	37.315	32.340	10.5	25.2	0.124							
Total Oxygen Injected Per Day (lb)			33.008									35.675									36.563								
System Total Per Day (lb)			233.50									224.67									258.85								

Weight of Oxygen Injected through Q3 2021 845,286 lbs

Oxygen to OU-2 - 34 North Clinton			
Operational Days	Injected Per Month (lbs)		
Month 1 Oct-21	31	5,546	
Month 2 Nov-21	30	2,617	
Month 3 Dec-21	31	4,463	
Total Operational Days in Q4 2021	92		
Total Oxygen in Q4 2021	12,625.71		
Running Total for Oxygen to 34 North Clinton Through Q4 2021 (lbs)	857,911.71		

Notes:
SCFH (M) = Measured flow rate
SCFH (C*) = Flow rate converted for oxygen (Flow meters are calibrated for air)
CF/D (V) = Volume of oxygen injected per day
PSI (M) = Measured pressure
PSia (P) = Pressure converted to atmospheric pressure
 $n = PV/RT = (\text{lb Moles})$
lbs = n*32 lb/lb mole
Temperature = Degrees Rankine
R = Constant (10.73)

System Operating Specs
Total of 6 injection banks
Oxygen is injected for 13 minutes during each injection cycle
Each injection bank operates for 4 injection cycles per day
Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example
Bank 1 starts injection at 700AM
Bank 1 finishes injection at 713AM
System is recharging 713AM to 800AM
Bank 2 starts injection at 800AM
Bank 2 finishes injection at 813AM
System is recharging 813AM to 900AM
Bank 3 starts injection at 900AM
Bank 3 finishes injection at 913AM
System is recharging from 913AM to 1000AM
Bank 4 starts injection at 1000AM
Bank 4 finishes injection at 1013AM
System is recharging from 1013AM to 1100AM
Bank 5 starts injection at 1100AM
Bank 5 finishes injection at 1113AM
System is recharging from 1113AM to 1200PM
Bank 6 starts injection at 1200PM
Bank 6 finishes injection at 1213PM
System is recharging from 1213PM to 100PM
(Keep repeating cycle for course of day)

System Downtime
12/6/21 - Biannual maintenance
0900-1100

		December Monthly																			
		10/8/2021				11/5/2021				1/5/2022											
		O ₂ %																			
Temp R (T)	Depth	80.4				94.1				95.1											
		10.73																			
		631																			
Injection Bank 1	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	
	Point 1A	65	40	63.230	54.799	26.0	40.7	0.265	5	6.975	6.045	17.0	31.7	0.027	5	7.084	6.140	18.0	32.7	0.028	
	Point 1B	45	37	52.023	45.087	17.5	32.2	0.172	15	20.593	17.848	16.0	30.7	0.077	19	26.506	22.972	17.0	31.7	0.102	
	Point 2	30	32	41.352	35.839	12.5	27.2	0.116	17	22.369	19.386	13.5	28.2	0.076	40	51.690	44.798	12.5	27.2	0.171	
	Point 13A	65	30	46.540	40.335	24.5	39.2	0.188	5	6.975	6.045	17.0	31.7	0.027	5	6.975	6.045	17.0	31.7	0.027	
	Point 13B	45	31	42.559	36.685	16.0	30.7	0.134	17	23.339	20.227	16.0	30.7	0.087	28	38.441	33.315	16.0	30.7	0.144	
	Point 14	30	30	36.943	32.017	10.0	24.7	0.094	20	24.629	21.345	10.0	24.7	0.074	39	48.026	41.623	10.0	24.7	0.144	
	Point 25A	45	32	44.642	38.690	17.0	31.7	0.146	19	25.440	22.048	14.5	29.2	0.090	34	47.432	41.108	17.0	31.7	0.183	
Point 25B	30	35	43.534	37.730	10.5	25.2	0.113	21	26.121	22.638	10.5	25.2	0.080	43	53.485	46.354	10.5	25.2	0.164		
Total Oxygen Injected Per Day (lb)		39.286				17.189				30.839											
Injection Bank 2	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	
	Point 3A	65	36	56.203	48.710	25.0	39.7	0.230	5	6.920	5.997	16.5	31.2	0.026	5	7.906	6.765	19.0	33.7	0.032	
	Point 3B	45	30	40.510	35.109	15.0	29.7	0.124	17	22.956	19.895	15.0	29.7	0.083	33	44.561	38.620	15.0	29.7	0.161	
	Point 4	30	37	46.022	39.886	10.5	25.2	0.119	23	28.608	24.794	10.5	25.2	0.087	40	49.754	43.120	10.5	25.2	0.153	
	Point 15A	65	28	42.598	36.919	23.0	37.7	0.165	5	7.084	6.140	18.0	32.7	0.028	5	7.607	6.593	21.0	35.7	0.033	
	Point 15B	45	29	40.137	34.785	16.5	31.2	0.129	17	23.528	20.391	16.5	31.2	0.089	36	49.825	43.181	16.5	31.2	0.189	
	Point 16	30	27	33.249	28.816	10.0	24.7	0.085	24	29.254	25.353	9.5	24.2	0.086	33	40.638	35.219	9.0	23.7	0.117	
	Point 26A	45	30	41.852	36.272	17.0	31.7	0.137	21	28.831	24.987	16.0	30.7	0.107	28	39.062	33.854	16.5	31.2	0.148	
Point 26B	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Oxygen Injected Per Day (lb)		31.617				16.204				26.677											
Injection Bank 3	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	
	Point 5A	65	30	48.001	41.601	27.0	41.7	0.206	5	7.402	6.415	21.0	35.7	0.032	5	7.906	6.765	25.0	39.7	0.038	
	Point 5B	45	31	42.905	37.184	16.5	31.2	0.138	18	24.912	21.591	16.5	31.2	0.094	34	47.432	41.108	17.0	31.7	0.183	
	Point 6	30	30	35.804	31.030	8.5	23.2	0.085	19	22.676	19.652	8.5	23.2	0.064	36	42.965	37.236	8.5	23.2	0.121	
	Point 17A	65	30	46.540	40.335	24.5	39.2	0.188	5	7.138	6.187	18.5	33.2	0.029	18	27.019	23.417	22.0	36.7	0.121	
	Point 17B	45	31	42.905	37.184	16.5	31.2	0.138	18	24.912	21.591	16.5	31.2	0.094	40	55.361	47.979	16.5	31.2	0.210	
	Point 18	30	30	36.943	32.017	10.0	24.7	0.094	21	25.860	22.412	10.0	24.7	0.077	31	38.175	33.085	10.0	24.7	0.115	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		27.158				12.493				25.211											
Injection Bank 4	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	
	Point 7A	65	30	47.713	41.351	26.5	41.2	0.202	5	7.657	6.636	23.5	38.2	0.035	5	7.084	6.140	18.0	32.7	0.028	
	Point 7B	45	32	44.642	38.690	17.0	31.7	0.146	21	29.296	25.390	17.0	31.7	0.113	16	21.966	19.037	16.0	30.7	0.082	
	Point 8	30	31	35.559	31.418	10.5	25.2	0.100	22	27.635	23.950	11.0	25.7	0.086	5	6.291	5.443	11.0	25.7	0.020	
	Point 19A	65	30	47.422	41.099	26.0	40.7	0.199	5	7.607	6.593	23.0	37.7	0.035	5	7.030	6.093	17.5	32.2	0.028	
	Point 19B	45	31	43.247	37.481	17.0	31.7	0.141	22	30.691	26.599	17.0	31.7	0.118	20	27.901	24.181	17.0	31.7	0.108	
	Point 20	30	30	36.943	32.017	10.0	24.7	0.094	23	28.608	24.794	10.5	25.2	0.087	24	29.555	25.614	10.0	24.7	0.089	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		28.211				15.175				11.329											
Injection Bank 5	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	
	Point 9A	65	33	52.484	45.486	26.5	41.2	0.223	15	23.711	20.550	26.0	40.7	0.117	25	40.001	34.668	27.0	41.7	0.203	
	Point 9B	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Point 10	30	31	38.175	33.085	10.0	24.7	0.097	22	27.092	23.479	10.0	24.7	0.081	31	38.175	33.085	10.0	24.7	0.115	
	Point 21A	65	40	62.840	54.462	25.5	40.2	0.260	5	7.806	6.765	25.0	39.7	0.038	40	62.448	54.122	25.0	39.7	0.302	
	Point 21B	45	37	51.209	44.381	16.5	31.2	0.164	23	31.832	27.588	16.5	31.2	0.120	31	42.905	37.184	16.5	31.2	0.163	
	Point 22	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		23.808				11.394				25.043											
Injection Bank 6	Point	Depth	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSia (P)	=PV/RT lbs C	
	Point 11A	65	30	47.422	41.099	26.0	40.7	0.199	16	24.342	21.096	23.0	37.7	0.111	5	7.855	6.808	25.5	40.2	0.038	
	Point 11B	45	30	41.852	36.272	17.0	31.7	0.137	17	23.528	20.391	16.5	31.2	0.089	33	46.037	39.899	17.0	31.7	0.178	
	Point 12	30	31	38.559	33.418	10.5	25.2	0.100	21	26.121	22.638	10.5	25.2	0.080	34	41.869	36.286	10.0	24.7	0.126	
	Point 23	65	30	47.422	41.099	26.0	40.7	0.199	5	7.607	6.593	23.0	37.7	0.035	5	7.904	6.850	26.0	40.7	0.039	
	Point 24A	55	30	44.724	38.761	21.5	36.2	0.167	14	20.727	17.963	21.0	35.7	0.090	40	59.632	51.881	21.5	36.2	0.263	
	Point 24B	30	31	38.559	33.418	10.5	25.2	0.100	15	18.658	16.170	10.5	25.2	0.057	34	42.708	37.014	11.0	25.7	0.134	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Oxygen Injected Per Day (lb)		28.814				14.767				24.881											
System Total Per Day (lb)		178.89				87.22				143.98											

Appendix D. OU-2 Oxygen Injection System Operational Data
Table D-3. OU-2 34 North Clinton First Quarter 2022
 National Grid Bay Shore/Brightwaters Former MGP Site

Weight of Oxygen Injected through Q4 2021 857,912 lbs

Operational Days		Injected Per Month (lbs)
Month 1	Jan-22	31
Month 2	Feb-22	28
Month 3	Mar-22	31
Total Operational Days in Q1 2022		90
Total Oxygen in Q1 2022		11,456.82
Running Total for Oxygen to 34 North Clinton Through Q1 2022 (lbs)		869,368.82

Notes:

- SCFH (M) = Measured flow rate
- SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CF/D (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSia (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (lb Moles)
- lbs = n*32 lb/lb mole
- Temperature = Degrees Rankine
- R = Constant (10.73)

System Operating Spects

- Total of 6 injection banks
- Oxygen is injected for 13 minutes during each injection cycle
- Each injection bank operates for 4 injection cycles per day
- Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example

- Bank 1 starts injection at 700AM
- Bank 1 finishes injection at 713AM
- System is recharging 713AM to 800AM
- Bank 2 starts injection at 800AM
- System is recharging 813AM to 900AM
- Bank 3 starts injection at 900AM
- Bank 3 finishes injection at 913AM
- System is recharging from 913AM to 1000AM
- Bank 4 starts injection at 1000AM
- Bank 4 finishes injection at 1013AM
- System is recharging from 1013AM to 1100AM
- Bank 5 starts injection at 1100AM
- Bank 5 finishes injection at 1113AM
- System is recharging from 1113AM to 1200PM
- Bank 6 starts injection at 1200PM
- Bank 6 finishes injection at 1213PM
- System is recharging from 1213PM to 100PM
- (Keep repeating cycle for course of day)

System Downtime

Injection Bank	Point	Depth	1/21/2022						2/18/2022						3/18/2022											
			SCFH (M)		SCFH (C)		CF/D (V)		PSI (M)		PSia (P)		PV/RT lbs C		SCFH (M)		SCFH (C)		CF/D (V)		PSI (M)		PSia (P)		PV/RT lbs C	
			10	10	13,951	12,091	17.0	31.7	0.056	11	15,224	13,194	16.5	31.2	0.061	13	18,278	15,841	17.5	32.2	0.071	10	15,904	13,784	26.5	41.2
Total Oxygen Injected Per Day (lb)			34.732						30.850						19.723											
Injection Bank 2	Point 3A	65	10	13,389	11,604	14.5	29.2	0.049	0	0.000	0.000	16.0	30.7	0.000	10	13,389	11,604	24.5	39.2	0.063	10	13,389	11,604	24.5	39.2	0.063
	Point 3B	45	10	13,158	11,404	13.5	28.2	0.047	11	14,854	12,873	15.0	29.7	0.056	19	25,000	21,667	15.0	29.7	0.090	10	12,438	10,780	10.0	24.7	0.037
	Point 4	30	20	24,877	21,560	10.5	25.2	0.079	25	31,096	26,950	10.5	25.2	0.100	10	12,438	10,780	10.0	24.7	0.037	30	41,187	35,695	23.5	38.2	0.190
	Point 15A	65	10	13,729	11,898	16.0	30.7	0.053	0	0.000	0.000	17.0	31.7	0.000	30	41,187	35,695	23.5	38.2	0.190	10	12,189	10,564	9.5	24.2	0.036
	Point 15B	45	10	13,617	11,801	15.5	30.2	0.052	38	52,593	45,580	16.5	31.2	0.210	30	40,850	35,403	16.5	31.2	0.154	10	12,189	10,564	9.5	24.2	0.036
Total Oxygen Injected Per Day (lb)			15.046						21.822						23.762											
Injection Bank 3	Point 5A	65	10	13,729	11,898	16.0	30.7	0.053	0	0.000	0.000	19.0	33.7	0.000	17	27,201	23,574	27.0	41.7	0.137	16	22,144	19,192	16.5	31.2	0.084
	Point 5B	45	12	16,204	14,044	15.0	29.7	0.061	21	29,064	25,189	16.5	31.2	0.116	16	22,144	19,192	16.5	31.2	0.084	10	11,935	10,343	8.5	23.2	0.033
	Point 6	30	12	14,322	12,412	8.5	23.2	0.042	44	52,512	45,511	8.5	23.2	0.156	10	11,935	10,343	8.5	23.2	0.033	16	24,821	21,512	24.5	39.2	0.118
	Point 17A	65	18	23,684	20,526	13.5	28.2	0.084	0	0.000	0.000	16.5	31.2	0.000	16	24,821	21,512	24.5	39.2	0.118	15	20,760	17,992	16.5	31.2	0.078
	Point 17B	45	10	13,503	11,703	15.0	29.7	0.050	34	47,057	40,782	16.5	31.2	0.188	15	20,760	17,992	16.5	31.2	0.078	10	12,314	10,672	10.0	24.7	0.037
Total Oxygen Injected Per Day (lb)			10.997						19.660						15.579											
Injection Bank 4	Point 7A	65	10	14,490	12,558	19.5	34.2	0.082	0	0.000	0.000	18.0	32.7	0.000	11	17,281	14,977	25.5	40.2	0.084	11	17,281	14,977	25.5	40.2	0.084
	Point 7B	45	38	53,012	45,944	17.0	31.7	0.212	10	13,951	12,091	17.0	31.7	0.056	24	33,482	29,017	17.0	31.7	0.128	12	15,073	13,064	11.0	25.7	0.047
	Point 8	30	32	40,196	34,836	11.0	25.7	0.130	38	47,733	41,368	11.0	25.7	0.157	12	15,073	13,064	11.0	25.7	0.047	21	32,785	28,414	25.0	39.7	0.157
	Point 19A	65	10	14,384	12,466	19.0	33.7	0.061	0	0.000	0.000	17.0	31.7	0.000	21	32,785	28,414	25.0	39.7	0.157	31	43,247	37,481	17.0	31.7	0.166
	Point 19B	45	26	36,272	31,435	17.0	31.7	0.145	100	138,402	119,948	16.5	31.2	0.552	31	43,247	37,481	17.0	31.7	0.166	10	12,314	10,672	10.0	24.7	0.037
Total Oxygen Injected Per Day (lb)			23.801						28.828						19.809											
Injection Bank 5	Point 9A	65	10	15,807	13,700	26.0	40.7	0.081	0	0.000	0.000	26.5	41.2	0.000	24	38,170	33,081	26.5	41.2	0.190	24	38,170	33,081	26.5	41.2	0.190
	Point 9B	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Point 10	30	27	33,249	28,816	10.0	24.7	0.103	28	34,480	29,883	10.0	24.7	0.109	13	16,009	13,874	10.0	24.7	0.048	23	35,908	31,120	25.0	39.7	0.172
	Point 21A	65	28	43,438	37,646	24.5	39.2	0.214	28	43,714	37,885	25.0	39.7	0.222	23	35,908	31,120	25.0	39.7	0.172	26	35,985	31,187	16.5	31.2	0.136
	Point 21B	45	30	41,521	35,985	16.5	31.2	0.163	23	40,137	34,785	16.5	31.2	0.160	26	35,985	31,187	16.5	31.2	0.136	28	43,714	37,885	25.0	39.7	0.222
Total Oxygen Injected Per Day (lb)			17.978						15.693						17.473											
Injection Bank 6	Point 11A	65	10	15,710	13,615	25.5	40.2	0.080	8	12,090	10,478	22.5	37.2	0.057	28	43,988	38,123	25.5	40.2	0.214	31	42,905	37,184	16.5	31.2	0.171
	Point 11B	45	30	41,852	36,272	17.0	31.7	0.167	31	42,905	37,184	16.5	31.2	0.171	12	16,741	14,509	17.0	31.7	0.064	10	12,314	10,672	10.0	24.7	0.037
	Point 12	30	30	37,315	32,340	10.5	25.2	0.118	30	38,048	32,975	11.5	26.2	0.127	10	12,314	10,672	10.0	24.7	0.037	28	43,714	37,885	25.0	39.7	0.222
	Point 23	65	10	15,807	13,700	26.0	40.7	0.081	0	0.000	0.000	22.5	37.2	0.000	26	41,099	35,619	26.0	40.7	0.202	30	47,706	41,345	21.5	36.2	0.207
	Point 24A	55	32	47,706	41,345	21.5	36.2	0.217	30	44,724	38,761	21.5	36.2	0.207	12	17,890	15,504	21.5	36.2	0.207	28	34,828	30,184	10.5	25.2	0.112
Total Oxygen Injected Per Day (lb)			25.387						21.590						20.261											
System Total Per Day (lb)			127.94						138.42						116.61											

Weight of Oxygen Injected through Q1 2022 869,369 lbs

Oxygen to OU-2 - 34 North Clinton			
Operational Days		Injected Per Month (lbs)	
Month 1	Apr-22	30	4,635
Month 2	May-22	31	4,246
Month 3	Jun-22	30	3,638
Total Operational Days in Q2 2022		91	
Total Oxygen in Q2 2022		12,519.37	
Running Total for Oxygen to 34 North Clinton Through Q2 2022 (lbs)		881,888.37	

Notes:
 SCFH (M) = Measured flow rate
 SCFH (C*) = Flow rate converted for oxygen (Flow meters are calibrated for air)
 CF/D (V) = Volume of oxygen injected per day
 PSI (M) = Measured pressure
 PSIs (P) = Pressure converted to atmospheric pressure
 $n = PV/RT = (\text{lb Moles})$
 lbs = n*32 lb/lb mole
 Temperature = Degrees Rankine
 R = Constant (10.73)

System Operating Specs
 Total of 6 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 4 injection cycles per day
 Each injection point injects oxygen for 52 min per day (13 min per cycle * 4 cycles)

Example
 Bank 1 starts injection at 700AM
 Bank 1 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 2 starts injection at 800AM
 Bank 2 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 3 starts injection at 900AM
 Bank 3 finishes injection at 913AM
 System is recharging 913AM to 1000AM
 Bank 4 starts injection at 1000AM
 Bank 4 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 5 starts injection at 1100AM
 Bank 5 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 6 starts injection at 1200PM
 Bank 6 finishes injection at 1213PM
 System is recharging from 1213PM to 100PM
 (Keep repeating cycle for course of day)

System Downtime

4/15/2022													6/1/2022					6/17/2022				
O ₂ %													93.8					73.5				
Temp R (T)													10.73					10.73				
632													623					652				
Injection Bank	Point	Depth	4/15/2022						6/1/2022						6/17/2022							
			SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIs (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIs (P)	=PV/RT lbs C	SCFH (M)	SCFH (C*)	CF/D (V)	PSI (M)	PSIs (P)	=PV/RT lbs C		
Injection Bank 1	Point 1A	65	10	14.384	12.466	19.0	33.7	0.058	10	15.113	13.098	22.5	37.2	0.068	10	14.596	12.650	20.0	34.7	0.046		
	Point 1B	45	17	23.716	20.554	17.0	31.7	0.090	18	25.111	21.763	17.0	31.7	0.096	32	44.642	38.690	17.0	31.7	0.129		
	Point 2	30	10	12.923	11.200	12.5	27.2	0.042	20	25.845	22.399	12.5	27.2	0.085	34	43.937	38.079	12.5	27.2	0.109		
	Point 13A	65	37	52.825	45.781	18.5	33.2	0.210	10	14.908	12.920	21.5	36.2	0.065	10	14.490	12.558	19.5	34.2	0.045		
	Point 13B	45	23	31.576	27.366	16.0	30.7	0.116	18	24.712	21.417	16.0	30.7	0.092	34	46.678	40.454	16.0	30.7	0.130		
	Point 14	30	10	12.314	10.672	10.0	24.7	0.036	18	22.166	19.210	10.0	24.7	0.066	36	44.332	38.421	10.0	24.7	0.100		
Point 25A	45	11	15.224	13.194	16.5	31.2	0.057	12	16.741	14.509	17.0	31.7	0.064	38	53.012	45.944	17.0	31.7	0.153			
Point 25B	30	16	18.703	17.076	10.0	24.7	0.058	19	23.633	20.482	10.5	25.2	0.072	38	47.266	40.964	10.5	25.2	0.108			
Total Oxygen Injected Per Day (lb)			21.394						19.441						26.258							
Injection Bank 2	Point 3A	65	10	13.729	11.898	16.0	30.7	0.051	20	28.338	24.560	18.0	32.7	0.112	40	54.915	47.593	7.0	21.7	0.109		
	Point 3B	45	19	25.656	22.236	15.0	29.7	0.091	22	29.707	25.746	15.0	29.7	0.106	15	20.255	17.554	15.0	29.7	0.055		
	Point 4	30	16	19.703	17.076	10.0	24.7	0.058	24	29.852	25.872	10.5	25.2	0.091	26	32.017	27.748	10.0	24.7	0.072		
	Point 15A	65	10	14.060	12.186	17.5	32.2	0.054	10	14.701	12.741	20.5	35.2	0.062	10	14.060	12.186	18.0	32.7	0.042		
	Point 15B	45	40	54.915	47.593	16.0	30.7	0.202	30	41.521	35.985	16.5	31.2	0.156	18	24.712	21.417	16.0	30.7	0.069		
	Point 16	30	38	46.319	40.143	9.5	24.2	0.134	36	43.881	38.030	9.5	24.2	0.128	32	39.005	33.805	9.0	23.7	0.084		
Point 26A	45	22	30.203	26.176	16.0	30.7	0.111	34	47.432	41.108	17.0	31.7	0.181	28	38.441	33.315	16.5	31.2	0.109			
Point 26B	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Total Oxygen Injected Per Day (lb)			22.468						26.804						17.267							
Injection Bank 3	Point 5A	65	22	33.470	29.008	23.0	37.7	0.151	10	14.384	12.466	19.0	33.7	0.059	10	15.612	13.530	25.0	39.7	0.056		
	Point 5B	45	21	29.064	25.189	16.5	31.2	0.109	23	34.992	30.326	23.0	37.7	0.159	35	48.827	42.317	17.0	31.7	0.141		
	Point 6	30	10	11.335	10.343	8.5	23.2	0.033	19	27.330	23.686	19.0	33.7	0.111	34	40.578	35.167	8.5	23.2	0.086		
	Point 17A	65	21	31.090	26.945	21.0	35.7	0.133	10	12.314	10.672	10.0	24.7	0.037	5	7.566	6.549	22.5	37.2	0.026		
	Point 17B	45	17	23.528	20.391	16.5	31.2	0.088	20	29.192	25.299	20.0	34.7	0.122	42	58.129	50.378	16.5	31.2	0.165		
	Point 18	30	10	12.314	10.672	10.0	24.7	0.036	18	25.504	22.104	18.0	32.7	0.101	32	39.406	34.152	10.0	24.7	0.089		
Total Oxygen Injected Per Day (lb)			17.622						18.833						17.998							
Injection Bank 4	Point 7A	65	15	22.669	19.646	22.5	37.2	0.101	10	15.807	13.700	26.0	40.7	0.078	10	15.807	13.700	26.0	40.7	0.059		
	Point 7B	45	30	41.852	36.272	17.0	31.7	0.159	27	37.667	32.645	17.0	31.7	0.144	24	33.482	29.017	17.0	31.7	0.097		
	Point 9	30	226	291.088	243.627	10.5	25.2	0.949	25	31.403	27.216	11.0	25.7	0.097	26	32.340	28.028	10.5	25.2	0.074		
	Point 19A	65	19	28.714	24.885	22.5	37.2	0.128	10	15.710	13.615	25.5	40.2	0.076	14	21.994	19.062	25.5	40.2	0.081		
	Point 19B	45	30	41.852	36.272	17.0	31.7	0.159	33	46.037	39.899	17.0	31.7	0.176	25	34.877	30.226	17.0	31.7	0.101		
	Point 20	30	10	12.438	10.780	10.5	25.2	0.038	31	38.559	33.416	10.5	25.2	0.117	25	31.096	26.950	10.5	25.2	0.071		
Total Oxygen Injected Per Day (lb)			45.888						22.043						15.422							
Injection Bank 5	Point 9A	65	35	55.326	47.949	26.0	40.7	0.270	42	67.202	58.242	27.0	41.7	0.338	36	57.602	49.921	27.0	41.7	0.219		
	Point 9B	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Point 10	30	23	28.323	24.547	10.0	24.7	0.084	25	30.786	26.681	10.0	24.7	0.092	30	36.943	32.017	10.0	24.7	0.083		
	Point 21A	65	32	49.959	43.297	25.0	39.7	0.238	40	62.840	54.462	25.5	40.2	0.305	35	54.642	47.357	25.0	39.7	0.198		
	Point 21B	45	24	33.216	28.788	16.5	31.2	0.124	24	33.216	28.788	16.5	31.2	0.125	37	51.209	44.381	16.5	31.2	0.145		
	Point 22	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total Oxygen Injected Per Day (lb)			22.906						27.521						20.633							
Injection Bank 6	Point 11A	65	40	61.257	53.090	23.5	38.2	0.281	11	17.281	14.977	25.5	40.2	0.084	22	34.776	30.140	26.0	40.7	0.129		
	Point 11B	45	12	16.741	14.509	17.0	31.7	0.064	30	41.852	36.272	17.0	31.7	0.160	32	44.642	38.690	17.0	31.7	0.129		
	Point 12	30	10	12.438	10.780	10.5	25.2	0.038	29	36.071	31.262	10.5	25.2	0.110	30	37.315	32.340	10.5	25.2	0.086		
	Point 23	65	38	58.194	50.435	23.5	38.2	0.266	10	15.710	13.615	25.5	40.2	0.076	16	25.447	22.054	26.5	41.2	0.095		
	Point 24A	55	11	16.285	14.114	21.0	35.7	0.070	28	41.742	36.177	21.5	36.2	0.182	42	63.045	54.639	22.0	36.7	0.211		
	Point 24B	30	10	12.561	10.866	11.0	25.7	0.039	22	27.635	23.950	11.0	25.7	0.086	31	38.940	33.748	11.0	25.7	0.091		
Total Oxygen Injected Per Day (lb)			24.211						22.338						23.699							
System Total Per Day (lb)			154.49						136.98						121.28							

**Appendix D. OU-2 Oxygen Injection System Operational Data
Table D-4. OU-2 33 North Clinton Second Quarter 2022
National Grid Bay Shore/Brightwaters Former MGP Site**

Weight of Oxygen Injected through Q1 2021 931,091 lbs

Operational Days			Injected Per Month (lbs)
Month 1	Apr-22	30	1,578
Month 2	May-22	31	2,342
Month 3	Jun-22	30	2,078
Total Operational Days in Q2 2022			91
Total Oxygen in Q2 2022			5,987.66
Running Total for Oxygen to 33 North Clinton Through Q2 2022 (lbs)			937,088.66

Notes:
SCFH (M) = Measured flow rate
SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
CFD (V) = Volume of oxygen injected per day
PSI (M) = Measured pressure
PSIA (P) = Pressure converted to atmospheric pressure.
n = PV/RT = (lb Moles)
lbs = n*32 lb/lb mole
Temperature = Degrees Rankine
R = Constant (10.73)
* Readings for Sep 2020 taken from Aug 2020 because inspection was not able to be performed.

System Operating Splits
Total of 8 injection banks
Oxygen is injected for 13 minutes during each injection cycle
Each injection bank operates for 3 injection cycles per day
Each injection point injects oxygen for 39 min per day (13 min per cycle * 3 cycles)

Example
Bank 1 starts injection at 700AM
Bank 1 finishes injection at 713AM
System is recharging 713AM to 800AM
Bank 2 starts injection at 800AM
Bank 2 finishes injection at 813AM
System is recharging 813AM to 900AM
Bank 3 starts injection at 900AM
Bank 3 finishes injection at 913AM
System is recharging from 913AM to 1000AM
Bank 4 starts injection at 1000AM
Bank 4 finishes injection at 1013AM
System is recharging from 1013AM to 1100AM
Bank 5 starts injection at 1100AM
Bank 5 finishes injection at 1113AM
System is recharging from 1113AM to 1200PM
Bank 6 starts injection at 1200PM
Bank 6 finishes injection at 1213PM
System is recharging from 1213PM to 100PM
Bank 7 starts injection at 100PM
Bank 7 finishes injection at 113PM
System is recharging from 113PM to 200PM
Bank 8 starts injection at 200PM
Bank 8 finishes injection at 213PM
System is recharging from 213PM to 300PM
(Keep repeating cycle for course of day)

System Downtime

Injection Bank	Point	4/15/2022							5/19/2022							6/30/2022											
		Temp R (T)							Temp R (T)							Temp R (T)											
		Depth	SCFH (M)	SCFH (C)	CFD (V)	PSI (M)	PSIA (P)	n	Depth	SCFH (M)	SCFH (C)	CFD (V)	PSI (M)	PSIA (P)	n	Depth	SCFH (M)	SCFH (C)	CFD (V)	PSI (M)	PSIA (P)	n					
Injection Bank 1	Point 1A	62	26	39.817	25.881	23.5	38.2	0.034	28	42.598	27.689	23.0	37.7	0.044	24	36.754	23.890	23.5	38.2	0.040							
	Injection Bank 2	Point 2A	67	24	38.170	24.811	26.5	41.2	0.035	38	60.436	39.284	26.5	41.2	0.068	29	45.842	29.797	26.0	40.7	0.053						
		Injection Bank 3	Point 3A	65	24	37.938	24.660	26.0	40.7	0.034	29	46.842	29.797	26.0	40.7	0.051	23	36.133	23.787	25.5	40.2	0.041					
			Injection Bank 4	Point 4A	69	25	40.001	26.001	27.0	41.7	0.037	26	41.601	27.041	27.0	41.7	0.047	30	48.001	31.201	27.0	41.7	0.057				
				Injection Bank 5	Point 5A	67	24	37.704	24.508	25.5	40.2	0.034	36	56.556	36.762	25.5	40.2	0.062	32	50.272	32.677	25.0	40.2	0.058			
					Injection Bank 6	Point 6A	69	25	40.001	26.001	27.0	41.7	0.037	30	41.521	26.888	26.5	41.2	0.035	25	34.322	22.309	26.0	30.7	0.030		
						Injection Bank 7	Point 7A	60	22	33.691	21.899	23.5	38.2	0.028	28	42.880	27.872	23.5	38.2	0.044	32	49.006	31.854	23.5	38.2	0.053	
							Injection Bank 8	Point 8A	60	22	33.691	21.899	23.5	38.2	0.028	34	42.291	27.489	23.5	38.2	0.029	20	24.629	16.009	23.0	37.7	0.024

Appendix D

OU-3 Oxygen Injection System Operational Data

Weight of Oxygen Injected through Q2 2021 389,868 lbs

Oxygen to OU-3 - 87 Community			
Month	Operational Days	Injected Per Month (lbs)	Temp R (°C)
Month 1	Jul-21	30	4.116
Month 2	Aug-21	31	4.312
Month 3	Sep-21	7	9.95
Total Operational Days in Q3 2021		68	
Total Oxygen in Q3 2021 (lbs)		9,422.52	
Running Total for Oxygen to 87 Community Rd Through Q3 2021 (lbs)		399,290.52	

Injection Bank	Point	Depth	7/14/2021							8/4/2021							9/14/2021									
			SCFH (M)			CF/D (V)		PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)	SCFH (M)			CF/D (V)		PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)	SCFH (M)			CF/D (V)		PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)
			SCFH (M)	SCFH (C ¹)	CF/D (V)	PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)	SCFH (M)	SCFH (C ¹)	CF/D (V)	PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)	SCFH (M)	SCFH (C ¹)	CF/D (V)	PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)	SCFH (M)	SCFH (C ¹)	CF/D (V)	PSI (M)	PSia (P)	n-PV/RT (lbs O ₂)
Total Oxygen Injected Per Day (lb)			19.073							20.266							20.427									
Total Oxygen Injected Per Day (lb)			20.256							20.221							20.803									
Total Oxygen Injected Per Day (lb)			21.589							21.170							23.368									
Total Oxygen Injected Per Day (lb)			19.676							19.851							20.310									
Total Oxygen Injected Per Day (lb)			21.341							21.432							21.482									
Total Oxygen Injected Per Day (lb)			16.343							15.958							16.600									
Total Oxygen Injected Per Day (lb)			18.915							20.198							19.110									
System Total Per Day (lb)			137.19							139.10							142.11									

Notes:

- SCFH (M) = Measured flow rate
- SCFH (C¹) = Flow rate converted for oxygen (Flow meters are calibrated for air)
- CF/D (V) = Volume of oxygen injected per day
- PSI (M) = Measured pressure
- PSia (P) = Pressure converted to atmospheric pressure
- n = PV/RT = (lb Moles)
- lbs = n*32 lb/lb mole
- Temperature = Degrees Rankine
- R = Constant (10.73)
- * Oxygen percentage readings for Feb/Mar 2019 taken from January due to water being found in the line and therefore unable to take an accurate reading

System Operating Specs

- Total of 7 injection banks
- Oxygen is injected for 13 minutes during each injection cycle
- Each injection bank operates for 3.4 injection cycles per day
- Each injection point injects oxygen for 44.2 min per day (13 min per cycle * 3.4 cycles)

Example

- Bank 1 starts injection at 700AM
- Bank 1 finishes injection at 713AM
- System is recharging 713AM to 800AM
- Bank 2 starts injection at 800AM
- Bank 2 finishes injection at 813AM
- System is recharging 813AM to 900AM
- Bank 3 starts injection at 900AM
- Bank 3 finishes injection at 913AM
- System is recharging from 913AM to 1000AM
- Bank 4 starts injection at 1000AM
- Bank 4 finishes injection at 1013AM
- System is recharging from 1013AM to 1100AM
- Bank 5 starts injection at 1100AM
- Bank 5 finishes injection at 1113AM
- System is recharging from 1113AM to 1200PM
- Bank 6 starts injection at 1200PM
- Bank 6 finishes injection at 1213PM
- System is recharging from 1213PM to 100PM
- Bank 7 starts injection at 100PM
- Bank 7 finishes injection at 113pm
- (Keep repeating cycle for course of day)

System Downtime

- 7/8/21 - Power outage 1310-1400
- 7/17/21-7/18/21 - Power Outage 2021-1000
- 9/6/21-9/7/21 - Sensor malfunctioned on compressor 0751-1000
- 9/7/21-9/8/21 - Sensor malfunctioned on compressor 1500-0800
- 9/8/21-9/30/21 - Sensor malfunctioned on compressor 1100-0930

Appendix E. OU-3 Oxygen Injection System Operational Data
Table D-1. OU-3 87 Community Fourth Quarter 2021
 National Grid Bay Shore/Brightwaters Former MGP Site

Weight of Oxygen Injected through Q3 2021 399,291 lbs

Oxygen to OU-3 - 87 Community		Injected Per Month (lbs)
Operational Days	31	4,149
Month 1 Oct-21	30	4,273
Month 2 Nov-21	31	4,120
Month 3 Dec-21	31	92
Total Operational Days in Q4 2021	92	12,541.99
Total Oxygen in Q4 2021 (lbs)	411,832.51	

Notes:
 SCFH (M) = Measured flow rate
 SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
 CF/D (V) = Volume of oxygen injected per day
 PSI (M) = Measured pressure
 PSia (P) = Pressure converted to atmospheric pressure
 $n = P/VRT = (\text{lb Moles})$
 $lbs = n \times 32 \text{ lb/lb mole}$
 Temperature = Degrees Rankine
 $R = \text{Constant} (10.73)$

* Oxygen percentage readings for Feb/Mar 2019 taken from January due to water being found in the line and therefore unable to take an accurate reading

System Operating Specs
 Total of 7 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 3.4 injection cycles per day
 Each injection point injects oxygen for 44.2 min per day (13 min per cycle * 3.4 cycles)

Example
 Bank 1 starts injection at 700AM
 Bank 1 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 2 starts injection at 800AM
 Bank 2 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 3 starts injection at 900AM
 Bank 3 finishes injection at 913AM
 System is recharging from 913AM to 1000AM
 Bank 4 starts injection at 1000AM
 Bank 4 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 5 starts injection at 1100AM
 Bank 5 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 6 starts injection at 1200PM
 Bank 6 finishes injection at 1213PM
 System is recharging from 1213PM to 100PM
 Bank 7 starts injection at 100PM
 Bank 7 finishes injection at 113pm
 (Keep repeating cycle for course of day)

System Downtime
 10/18/21 - Power outage
 1045-1900
 12/6/21 - Biannual Maintenance
 1300-1500

		10/6/2021										11/6/2021										12/15/2021									
		81.6										79.6										80.3									
		10.73										10.73										10.73									
		615										597										587									
Temp R (T)		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n	PVRT (lbs)	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n	PVRT (lbs)	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSia (P)	n	PVRT (lbs)								
Injection Bank 1	Point 1A	11	23	24.644	18.155	4.0	18.7	0.042	29	31.073	22.890	4.0	18.7	0.054	29	31.073	22.890	4.0	18.7	0.055	29	31.073	22.890	4.0	18.7	0.055					
	Point 1B	21	30	35.416	26.090	8.0	22.7	0.073	35	41.771	30.771	8.5	23.2	0.090	33	38.958	28.699	8.0	22.7	0.083	30	38.958	28.699	8.0	22.7	0.099					
	Point 1C	31	30	38.768	28.559	12.5	27.2	0.096	28	36.183	26.655	12.5	27.2	0.092	30	38.768	28.559	12.5	27.2	0.099	30	38.768	28.559	12.5	27.2	0.099					
	Point 2A	11	30	32.145	23.680	4.0	18.7	0.055	40	42.859	31.573	4.0	18.7	0.075	35	37.502	27.626	4.0	18.7	0.066	30	37.502	27.626	4.0	18.7	0.066					
	Point 2B	21	27	33.584	24.740	10.5	25.2	0.077	30	37.315	27.489	10.5	25.2	0.088	30	37.315	27.489	10.5	25.2	0.088	29	37.315	27.489	10.5	25.2	0.088					
	Point 2C	31	29	37.475	27.607	12.5	27.2	0.093	29	37.129	27.352	12.0	26.7	0.092	29	36.780	27.095	11.5	26.2	0.091	31	33.216	24.469	4.0	18.7	0.058					
Point 3A	11	27	29.694	21.874	5.0	19.7	0.053	30	32.571	23.994	4.5	19.2	0.058	31	33.216	24.469	4.0	18.7	0.058	30	35.416	26.090	8.0	22.7	0.076						
Point 3B	21	29	34.610	25.496	8.5	23.2	0.073	30	35.416	26.090	8.0	22.7	0.075	30	35.416	26.090	8.0	22.7	0.075	30	35.416	26.090	8.0	22.7	0.075						
Total Oxygen Injected Per Day (lb)		17.997										19.951										19.686									
Injection Bank 2	Point 3C	31	31	40.427	29.781	13.0	27.7	0.102	32	42.106	31.018	13.5	28.2	0.111	29	37.818	27.860	13.0	27.7	0.098	29	31.486	23.194	4.5	19.2	0.057					
	Point 4A	11	29	31.486	23.194	4.5	19.2	0.055	33	36.292	26.735	5.0	19.7	0.067	29	31.486	23.194	4.5	19.2	0.057	29	34.235	25.220	8.0	22.7	0.073					
	Point 4B	21	26	30.694	22.611	8.0	22.7	0.063	31	36.987	26.959	8.0	22.7	0.077	29	34.235	25.220	8.0	22.7	0.073	29	34.235	25.220	8.0	22.7	0.073					
	Point 4C	31	30	39.122	28.820	13.0	27.7	0.099	30	39.122	28.820	13.0	27.7	0.101	28	36.514	26.899	13.0	27.7	0.095	28	36.514	26.899	13.0	27.7	0.095					
	Point 5A	11	29	31.073	22.890	4.0	18.7	0.053	36	38.573	28.416	4.0	18.7	0.067	28	29.598	21.804	3.5	18.2	0.051	28	29.598	21.804	3.5	18.2	0.051					
	Point 5B	21	27	31.874	23.481	8.0	22.7	0.066	31	36.967	27.255	8.5	23.2	0.080	28	33.055	24.350	8.0	22.7	0.070	28	33.055	24.350	8.0	22.7	0.070					
Point 5C	31	31	40.427	29.781	13.0	27.7	0.102	37	48.251	38.545	13.0	27.7	0.124	29	37.818	27.860	13.0	27.7	0.098	30	32.571	23.994	4.5	19.2	0.059						
Point 6A	11	26	28.229	20.795	4.5	19.2	0.049	32	34.743	25.594	4.5	19.2	0.062	30	32.571	23.994	4.5	19.2	0.059	30	32.571	23.994	4.5	19.2	0.059						
Total Oxygen Injected Per Day (lb)		18.863										22.046										19.242									
Injection Bank 3	Point 6B	21	29	33.473	24.658	7.0	21.7	0.066	29	33.473	24.658	7.0	21.7	0.068	28	32.319	23.860	7.0	21.7	0.066	28	32.319	23.860	7.0	21.7	0.066					
	Point 6C	31	29	37.475	27.607	12.5	27.2	0.093	33	42.645	31.415	12.5	27.2	0.108	26	33.288	24.523	12.0	26.7	0.083	27	29.694	21.874	5.0	19.2	0.055					
	Point 7A	11	27	29.314	21.595	4.5	19.2	0.051	32	35.192	25.925	5.0	19.7	0.065	27	29.694	21.874	5.0	19.2	0.055	26	30.694	22.611	8.0	22.7	0.065					
	Point 7B	21	29	34.235	25.220	8.0	22.7	0.071	29	34.235	25.220	8.0	22.7	0.072	26	30.694	22.611	8.0	22.7	0.065	26	30.694	22.611	8.0	22.7	0.065					
	Point 7C	31	29	37.818	27.860	13.0	27.7	0.096	29	38.158	28.110	13.5	28.2	0.100	28	36.514	26.899	13.0	27.7	0.095	28	36.514	26.899	13.0	27.7	0.095					
	Point 8A	16	30	33.409	24.611	5.5	20.2	0.061	32	35.636	26.252	5.5	20.2	0.067	29	32.295	23.791	5.5	20.2	0.061	29	32.295	23.791	5.5	20.2	0.061					
Point 8B	26	27	33.249	24.493	10.0	24.7	0.075	26	32.017	23.586	10.0	24.7	0.074	26	32.017	23.586	10.0	24.7	0.074	26	32.017	23.586	10.0	24.7	0.074						
Point 8C	36	26	34.513	25.424	14.0	28.7	0.090	31	41.150	30.314	14.0	28.7	0.110	28	37.168	27.380	14.0	28.7	0.100	28	37.168	27.380	14.0	28.7	0.100						
Total Oxygen Injected Per Day (lb)		19.297										21.225										19.214									
Injection Bank 4	Point 8A	16	30	32.993	24.305	5.0	19.7	0.059	31	34.093	25.115	5.0	19.7	0.063	28	30.793	22.684	5.0	19.7	0.057	28	30.793	22.684	5.0	19.7	0.057					
	Point 8B	26	30	35.416	26.090	8.0	22.7	0.073	32	37.771	27.829	8.0	22.7	0.080	30	35.416	26.090	8.0	22.7	0.073	30	35.416	26.090	8.0	22.7	0.073					
	Point 8C	36	30	39.474	29.079	13.5	28.2	0.101	32	42.106	31.018	13.5	28.2	0.111	26	34.211	25.202	13.5	28.2	0.091	26	34.211	25.202	13.5	28.2	0.091					
	Point 10A	16	29	30.655	22.582	3.5	18.2	0.051	31	32.769	24.140	3.5	18.2	0.056	30	31.712	23.361	3.5	18.2	0.054	30	31.712	23.361	3.5	18.2	0.054					
	Point 10B	26	30	36.943	27.215	10.0	24.7	0.083	29	35.712	26.308	10.0	24.7	0.082	27	33.249	24.493	10.0	24.7	0.077	27	33.249	24.493	10.0	24.7	0.077					
	Point 10C	36	34	45.132	33.247	14.0	28.7	0.118	37	49.114	36.181	14.0	28.7	0.131	28	37.168	27.380	14.0	28.7	0.100	28	37.168	27.380	14.0	28.7	0.100					
Point 11A	16	27	29.694	21.874	5.0	19.7	0.053	32	35.636	26.252	5.5	20.2	0.067	31	34.093	25.115	5.0	19.7	0.053	31	34.093	25.115	5.0	19.7	0.053						
Point 11B	26	30	36.188	26.658	9.0	23.7	0.078	30	36.567	26.938	9.5	24.2	0.082	29	34.981	25.770	9.0	23.7	0.078	29	34.981	25.770	9.0	23.7	0.078						
Total Oxygen Injected Per Day (lb)		19.750										21.478										19.057									
Injection Bank 5	Point 11C	36	30	39.822	29.336	14.0	28.7	0.104	28	37.168	27.380	14.0	28.7	0.099	37	49.114	36.181	14.0	28.7	0.132	37	49.114	36.181	14.0	28.7	0.132					
	Point 12A	16	31	34.093	25.115	5.0	19.7	0.061	27	29.694	21.874	5.0	19.7	0.054	10	10.571	7.787	3.5	18.2	0.018	10	10.571	7.787	3.5	18.2	0.018					
	Point 12B	26	33	38.958	28.699	8.0	22.7	0.081	32	37.777	27.829	8.0	22.7	0.080	31	36.191	26.661	7.5	22.2	0.075	31	36.191	26.661	7.5	22.2	0.075					
	Point 12C	36	30	39.474	29.079	13.5	28.2	0.101	27	35.527	26.171	13.5	28.2	0.093	33	43.035	31.702	13.0	27.7	0.112	33	43.035	31.702	13.0	27.7	0.112					
	Point 15A	15	30	34.226	25.213	6.5	21.2	0.066	31	34.947	25.74																				

Weight of Oxygen Injected through Q4 2021 **411,833** lbs

Oxygen to OU-3 - 87 Community			
Month	Operational Days	Injected Per Month (lbs)	
	Jan-22	31	3,969
Feb-22	28	3,790	
Mar-22	31	4,545	
Total Operational Days in Q1 2022		90	
Total Oxygen in Q1 2022 (lbs)		12,143.32	
Running Total for Oxygen to 87 Community Rd Through Q1 2022 (lbs)		423,975.83	

Notes:
 SCFH (M) = Measured flow rate
 SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
 CF/D (V) = Volume of oxygen injected per day
 PSI (M) = Measured pressure
 PSIa (P) = Pressure converted to atmospheric pressure
 n = PV/RT = (lb Moles)
 lbs = n*32 lb/lb mole
 Temperature = Degrees Rankine
 R = Constant (10.73)
 * Oxygen percentage readings for Feb/Mar 2019 taken from January due to water being found in the line and therefore unable to take an accurate reading

System Operating Specs

Total of 7 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 3.4 injection cycles per day
 Each injection point injects oxygen for 44.2 min per day (13 min per cycle * 3.4 cycles)

Example

Bank 1 starts injection at 700AM
 Bank 1 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 2 starts injection at 800AM
 Bank 2 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 3 starts injection at 900AM
 Bank 3 finishes injection at 913AM
 System is recharging from 913AM to 1000AM
 Bank 4 starts injection at 1000AM
 Bank 4 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 5 starts injection at 1100AM
 Bank 5 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 6 starts injection at 1200PM
 Bank 6 finishes injection at 1213PM
 System is recharging from 1213PM to 100PM
 Bank 7 starts injection at 100PM
 Bank 7 finishes injection at 113pm
 (Keep repeating cycle for course of day)

System Downtime

01/18/22 - Power Outage
 0830-1000

	O ₂ %	1/13/2022									2/3/2022									3/14/2022								
		Temp R (T)	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
Injection Bank 1		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
	Point 1A	11	28	30.002	22.101	4.0	18.7	0.047	29	31.073	22.890	4.0	18.7	0.053	29	31.073	22.890	4.0	18.7	0.057								
	Point 1B	21	29	34.235	25.220	6.0	22.7	0.064	30	35.416	26.090	6.0	22.7	0.074	29	34.610	25.496	8.5	23.2	0.079								
	Point 1C	31	29	37.475	27.607	12.5	27.2	0.086	31	40.060	29.511	12.5	27.2	0.100	30	38.768	28.559	12.5	27.2	0.104								
	Point 2A	11	27	28.930	21.312	4.0	18.7	0.045	31	33.216	24.469	4.0	18.7	0.057	28	30.002	22.101	4.0	18.7	0.055								
	Point 2B	21	29	36.071	26.573	10.5	25.2	0.075	30	36.943	27.215	10.0	24.7	0.084	29	36.071	26.573	10.5	25.2	0.090								
Point 2C	31	29	37.129	27.352	12.0	26.7	0.082	29	37.129	27.352	12.0	26.7	0.091	30	38.410	28.595	12.0	26.7	0.101									
Point 3A	11	29	31.073	22.890	4.0	18.7	0.048	30	32.145	23.680	4.0	18.7	0.055	30	32.571	23.994	4.5	19.2	0.062									
Point 3B	21	30	35.804	26.376	8.5	23.2	0.069	30	35.804	26.376	8.5	23.2	0.076	30	35.804	26.376	8.5	23.2	0.082									
Total Oxygen Injected Per Day (lb)		16.474									18.938									20.220								
Injection Bank 2		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
	Point 3C	31	30	39.122	28.820	13.0	27.7	0.090	32	42.477	31.292	14.0	28.7	0.112	30	39.474	29.079	13.5	28.2	0.110								
	Point 4A	11	30	32.993	24.305	6.0	19.7	0.054	32	34.743	25.594	4.5	19.2	0.061	30	32.993	24.305	5.0	19.7	0.064								
	Point 4B	21	31	36.597	26.959	8.0	22.7	0.069	31	36.597	26.959	8.0	22.7	0.076	30	35.416	26.090	8.0	22.7	0.079								
	Point 4C	31	30	39.122	28.820	13.0	27.7	0.090	31	40.427	29.781	13.0	27.7	0.103	29	37.818	27.860	13.0	27.7	0.104								
	Point 5A	11	30	32.145	23.680	4.0	18.7	0.050	28	30.002	22.101	4.0	18.7	0.052	30	32.145	23.680	4.0	18.7	0.059								
Point 5B	21	30	35.416	26.090	8.0	22.7	0.067	30	35.416	26.090	8.0	22.7	0.074	31	36.997	27.255	8.5	23.2	0.085									
Point 5C	31	29	37.818	27.860	13.0	27.7	0.087	31	40.427	29.781	13.0	27.7	0.103	31	40.790	30.048	13.5	28.2	0.114									
Point 6A	11	30	32.571	23.994	4.5	19.2	0.052	30	32.571	23.994	4.5	19.2	0.058	31	34.093	25.115	5.0	19.7	0.066									
Total Oxygen Injected Per Day (lb)		17.842									20.455									21.821								
Injection Bank 3		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
	Point 6B	21	31	35.781	26.359	7.0	21.7	0.064	29	33.473	24.658	7.0	21.7	0.067	32	36.936	27.209	7.0	21.7	0.079								
	Point 6C	31	33	42.645	31.415	12.5	27.2	0.096	30	38.768	28.559	12.5	27.2	0.097	30	38.768	28.559	12.5	27.2	0.104								
	Point 7A	11	33	36.282	26.735	6.0	19.7	0.059	31	34.093	25.115	5.0	19.7	0.062	32	36.192	26.925	5.0	19.7	0.069								
	Point 7B	21	30	35.416	26.090	8.0	22.7	0.067	29	34.235	25.220	8.0	22.7	0.072	30	35.416	26.090	8.0	22.7	0.079								
	Point 7C	31	31	40.427	29.781	13.0	27.7	0.093	29	37.818	27.860	13.0	27.7	0.096	31	40.790	30.048	13.5	28.2	0.114								
Point 8A	16	32	35.536	26.252	6.5	20.2	0.060	30	33.409	24.611	5.5	20.2	0.062	30	33.409	24.611	5.5	20.2	0.067									
Point 8B	26	27	33.249	24.493	10.0	24.7	0.068	28	34.480	25.401	10.0	24.7	0.078	32	38.803	29.322	10.5	25.2	0.099									
Point 8C	36	34	45.823	33.536	14.5	29.2	0.110	28	37.168	27.380	14.0	28.7	0.098	32	42.846	31.563	14.5	29.2	0.124									
Total Oxygen Injected Per Day (lb)		19.750									20.230									23.519								
Injection Bank 4		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
	Point 9A	16	32	35.192	25.925	5.0	19.7	0.057	29	31.893	23.495	5.0	19.7	0.058	30	32.993	24.305	5.0	19.7	0.064								
	Point 9B	26	32	37.777	27.829	8.0	22.7	0.071	28	33.055	24.350	8.0	22.7	0.069	30	35.416	26.090	8.0	22.7	0.079								
	Point 9C	36	30	39.474	29.079	13.5	28.2	0.092	28	36.842	27.141	13.5	28.2	0.096	30	39.474	29.079	13.5	28.2	0.110								
	Point 10A	16	33	34.983	25.697	3.5	18.2	0.053	30	31.712	23.361	3.5	18.2	0.055	30	31.712	23.361	3.5	18.2	0.057								
	Point 10B	26	32	39.406	29.029	10.0	24.7	0.081	27	33.249	24.493	10.0	24.7	0.078	32	39.406	29.029	10.0	24.7	0.086								
Point 10C	36	31	41.150	30.314	14.0	28.7	0.098	30	39.822	29.336	14.0	28.7	0.105	35	48.459	34.225	14.0	28.7	0.132									
Point 11A	16	32	35.192	25.925	5.0	19.7	0.057	31	34.093	25.115	5.0	19.7	0.062	31	34.523	25.432	5.5	20.2	0.069									
Point 11B	26	31	37.786	27.836	9.5	24.2	0.076	30	36.567	26.938	9.5	24.2	0.081	30	36.567	26.938	9.5	24.2	0.088									
Total Oxygen Injected Per Day (lb)		18.730									19.185									22.255								
Injection Bank 5		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
	Point 11C	36	32	42.106	31.018	13.5	28.2	0.098	29	38.495	28.358	14.0	28.7	0.102	30	39.822	29.336	14.0	28.7	0.113								
	Point 12A	16	25	27.494	20.254	5.0	19.7	0.045	30	32.993	24.305	5.0	19.7	0.060	29	31.893	23.495	5.0	19.7	0.062								
	Point 12B	26	31	36.191	26.661	7.5	22.2	0.067	31	36.191	26.661	7.5	22.2	0.074	28	32.689	24.061	7.5	22.2	0.072								
	Point 12C	36	31	40.427	29.781	13.0	27.7	0.093	31	40.427	29.781	13.0	27.7	0.103	31	40.790	30.048	13.5	28.2	0.114								
	Point 15A	15	31	34.523	25.432	5.5	20.2	0.058	29	32.692	24.083	6.0	20.7	0.062	30	33.820	24.914	6.0	20.7	0.069								
Point 15B	30	32	40.585	29.898	11.5	26.2	0.088	29	36.428	26.835	11.0	25.7	0.086	30	37.684	27.760	11.0	25.7	0.096									
Point 16A	15	31	35.781	26.359	7.0	21.7	0.064	31	36.191	26.661	7.5	22.2	0.074	26	30.354	22.361	7.5	22.2	0.067									
Point 16B	30	30	38.410	28.295	12.0	26.7	0.085	31	39.690	29.238	12.0	26.7	0.098	30	38.410	28.295	12.0	26.7	0.101									
Total Oxygen Injected Per Day (lb)		18.138									21.066									22.198								
Injection Bank 6		Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSIa (P)	SPV/RT lbs/c								
	Point 13A	16	31	34.523	25.432	5.5	20.2	0.058	29	32.295	23.791	5.5	20.2	0.060	26	28.954	21.330	5.5	20.2	0.058								
	Point 13B	26	30	36.943	27.215	10.0	24.7	0.076	30	36.943	27.																	

Appendix E. OU-3 Oxygen Injection System Operational Data
 Table D-1. OU-3 87 Community Second Quarter 2022
 National Grid Bay Shore/Brightwaters Former MGP Site

Weight of Oxygen Injected through Q1 2022 423,976 lbs

Operational Days	Injected Per Month (lbs)
Month 1 Apr-22	30 5,168
Month 2 May-22	31 4,233
Month 3 Jun-22	30 3,592
Total Operational Days in Q2 2022	91
Total Oxygen in Q2 2022 (lbs)	12,992.66

Running Total for Oxygen to 87 Community Rd Through Q2 2022 (lbs) 436,968.66

Notes:
 SCFH (M) = Measured flow rate
 SCFH (C) = Flow rate converted for oxygen (Flow meters are calibrated for air)
 CF/D (V) = Volume of oxygen injected per day
 PSI (M) = Measured pressure
 PSLA (P) = Pressure converted to atmospheric pressure
 $n = n \cdot PVRT$ = (lb Moles)
 lbs = #*32 lb/lb mole
 Temperature = Degrees Rankine
 R = Constant (10.73)

* Oxygen percentage readings for Feb/Mar 2019 taken from January due to water being found in the line and therefore unable to take an accurate reading

System Operating Specs

Total of 7 injection banks
 Oxygen is injected for 13 minutes during each injection cycle
 Each injection bank operates for 3.4 injection cycles per day
 Each injection point injects oxygen for 44.2 min per day (13 min per cycle * 3.4 cycles)

Example

Bank 1 starts injection at 700AM
 Bank 1 finishes injection at 713AM
 System is recharging 713AM to 800AM
 Bank 2 starts injection at 800AM
 Bank 2 finishes injection at 813AM
 System is recharging 813AM to 900AM
 Bank 3 starts injection at 900AM
 Bank 3 finishes injection at 913AM
 System is recharging from 913AM to 1000AM
 Bank 4 starts injection at 1000AM
 Bank 4 finishes injection at 1013AM
 System is recharging from 1013AM to 1100AM
 Bank 5 starts injection at 1100AM
 Bank 5 finishes injection at 1113AM
 System is recharging from 1113AM to 1200PM
 Bank 6 starts injection at 1200PM
 Bank 6 finishes injection at 1213PM
 System is recharging from 1213PM to 100PM
 Bank 7 starts injection at 100PM
 Bank 7 finishes injection at 113pm
 (Keep repeating cycle for course of day)

System Downtime
 01/18/22 - Power Outage
 0830-1000

4/9/2022													5/16/2022													6/15/2022												
83.8													81.4													77.1												
10.73													10.73													10.73												
587													612													622												
Injection Bank	Point	Depth	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSI (P)	n	PVRT (lb/c)	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSI (P)	n	PVRT (lb/c)	SCFH (M)	SCFH (C)	CF/D (V)	PSI (M)	PSI (P)	n	PVRT (lb/c)															
Injection Bank 1	Point 1A	11	30	32.145	23.890	4.0	18.7	0.059	32	34.287	25.258	4.0	18.7	0.059	29	31.073	22.890	4.0	18.7	0.049																		
	Point 1B	21	29	34.610	25.496	8.5	23.2	0.079	30	35.804	26.376	8.5	23.2	0.078	29	34.235	25.220	8.0	22.7	0.066																		
	Point 1C	31	30	38.768	28.559	12.5	27.2	0.103	31	40.060	29.511	12.5	27.2	0.100	29	37.475	27.607	12.5	27.2	0.087																		
	Point 2A	11	28	30.002	22.101	4.0	18.7	0.055	28	30.002	22.101	4.0	18.7	0.051	28	30.002	22.101	4.0	18.7	0.048																		
	Point 2B	21	30	37.315	27.489	10.5	25.2	0.092	33	40.638	29.936	10.0	24.7	0.092	30	36.943	27.215	10.0	24.7	0.078																		
	Point 2C	31	28	35.849	26.409	12.0	26.7	0.094	30	38.410	28.295	12.0	26.7	0.094	31	39.690	29.238	12.0	26.7	0.090																		
	Point 3A	11	29	31.486	23.194	4.5	19.2	0.059	31	33.216	24.469	4.0	18.7	0.057	30	32.145	23.880	4.0	18.7	0.051																		
	Point 3B	21	26	31.030	22.859	8.5	23.2	0.071	31	36.997	27.255	8.5	23.2	0.078	29	34.610	25.496	8.5	23.2	0.068																		
Total Oxygen Injected Per Day (lb)			19.576										19.377										17.197															
Injection Bank 2	Point 3C	31	31	40.790	30.048	13.5	28.2	0.113	31	40.790	30.048	13.5	28.2	0.105	28	36.514	26.899	13.0	27.7	0.086																		
	Point 4A	11	30	32.993	24.305	5.0	19.7	0.064	28	30.793	22.684	5.0	19.7	0.055	28	30.400	22.395	4.5	19.2	0.050																		
	Point 4B	21	30	35.804	26.376	8.5	23.2	0.081	32	37.777	27.829	8.0	22.7	0.078	30	35.416	26.090	8.0	22.7	0.068																		
	Point 4C	31	29	37.818	27.860	13.0	27.7	0.103	31	40.427	29.781	13.0	27.7	0.102	30	39.122	28.820	13.0	27.7	0.092																		
	Point 5A	11	28	30.002	22.101	4.0	18.7	0.055	27	28.930	21.312	4.0	18.7	0.049	26	27.859	20.522	4.0	18.7	0.044																		
	Point 5B	21	28	33.417	24.617	8.5	23.2	0.076	28	33.055	24.350	8.0	22.7	0.069	28	33.055	24.350	8.0	22.7	0.064																		
	Point 5C	31	28	36.514	26.899	13.0	27.7	0.099	31	40.427	29.781	13.0	27.7	0.102	29	37.818	27.860	13.0	27.7	0.089																		
	Point 6A	11	26	28.229	20.795	4.5	19.2	0.053	26	28.229	20.795	4.5	19.2	0.049	25	27.143	19.995	4.5	19.2	0.044																		
Total Oxygen Injected Per Day (lb)			20.600										19.541										17.218															
Injection Bank 3	Point 6B	21	30	35.024	25.801	7.5	22.2	0.076	29	33.473	24.658	7.0	21.7	0.066	29	33.473	24.658	7.0	21.7	0.062																		
	Point 6C	31	28	36.514	26.899	13.0	27.7	0.099	30	38.768	28.559	12.5	27.2	0.096	27	34.569	25.466	12.0	26.7	0.079																		
	Point 7A	11	29	31.893	23.495	5.0	19.7	0.062	32	35.192	25.925	5.0	19.7	0.063	30	32.571	23.994	4.5	19.2	0.053																		
	Point 7B	21	30	35.804	26.376	8.5	23.2	0.081	30	35.416	26.090	8.0	22.7	0.073	29	34.235	25.220	8.0	22.7	0.066																		
	Point 7C	31	29	38.158	28.110	13.5	28.2	0.105	29	37.818	27.860	13.0	27.7	0.096	29	37.818	27.860	13.0	27.7	0.089																		
	Point 8A	16	32	35.636	26.252	5.5	20.2	0.071	31	34.523	25.432	5.5	20.2	0.064	28	31.182	22.970	5.5	20.2	0.054																		
	Point 8B	26	29	36.071	26.573	10.5	25.2	0.089	30	36.943	27.215	10.0	24.7	0.083	26	32.017	23.586	10.0	24.7	0.067																		
	Point 8C	36	33	44.185	32.549	14.5	29.2	0.126	31	41.150	30.314	14.0	28.7	0.108	30	39.822	29.336	14.0	28.7	0.097																		
Total Oxygen Injected Per Day (lb)			22.717										20.795										18.145															
Injection Bank 4	Point 8A	16	24	26.394	19.444	5.0	19.7	0.051	31	34.093	25.115	5.0	19.7	0.061	30	32.993	24.305	5.0	19.7	0.055																		
	Point 8B	26	29	33.417	24.617	8.5	23.2	0.076	30	34.616	26.090	8.0	22.7	0.073	31	35.597	26.959	8.0	22.7	0.071																		
	Point 9C	36	25	32.995	24.233	13.5	28.2	0.091	26	34.211	25.202	13.5	28.2	0.088	34	44.737	32.956	13.5	28.2	0.107																		
	Point 10A	16	26	27.484	20.246	3.5	18.2	0.049	30	31.712	23.361	3.5	18.2	0.053	30	31.712	23.361	3.5	18.2	0.049																		
	Point 10B	26	28	34.480	25.401	10.0	24.7	0.083	28	34.480	25.401	10.0	24.7	0.078	32	39.406	29.029	10.0	24.7	0.083																		
	Point 10C	36	25	33.185	24.447	14.0	28.7	0.093	31	41.150	30.314	14.0	28.7	0.108	34	45.132	33.247	14.0	28.7	0.110																		
	Point 11A	16	28	31.182	22.970	5.5	20.2	0.062	30	32.993	24.305	5.0	19.7	0.059	28	30.793	22.684	5.0	19.7	0.052																		
	Point 11B	26	28	34.130	25.142	9.5	24.2	0.081	28	34.130	25.142	9.5	24.2	0.075	32	39.005	28.734	9.5	24.2	0.080																		
Total Oxygen Injected Per Day (lb)			18.765										19.070										19.440															
Injection Bank 5	Point 11C	36	34	45.132	33.247	14.0	28.7	0.127	46	61.061	44.962	14.0	28.7	0.160	26	34.513	25.424	14.0	28.7	0.084																		
	Point 12A	16	31	34.093	25.115	5.0	19.7	0.066	30	32.993	24.305	5.0	19.7	0.059	26	28.594	21.064	5.0	19.7	0.048																		
	Point 12B	26	31	36.597	26.959	8.0	22.7	0.081	34	40.138	29.568	8.0	22.7	0.083	29	33.856	24.941	7.5	22.2	0.064																		
	Point 12C	36	31	40.790	30.048	13.5	28.2	0.113	27	35.527	26.117	13.5	28.2	0.091	28	36.842	27.141	13.5	28.2	0.088																		
	Point 15A	15	31	35.367	26.053	6.5	21.2	0.073	30	33.820	24.914	6.0	20.7	0.064	29	32.692	24.083	6.0	20.7	0.058																		
	Point 15B	30	32	40.585	29.898	11.5	26.2	0.104	27	34.244	25.226	11.5	26.2	0.082	27	33.915	24.984	11.5	26.2	0.074																		
	Point 16A	15	29	33.856	24.941	7.5	22.2	0.074	28	32.689	24.081	7.5	22.2	0.066	27	31.164	22.958	7.0	21.7	0.058																		
	Point 16B	30	33	42.068	31.134	12.0	26.7	0.112	27	34.599	25.466	12.0	26.7	0.084	28	35.849	26.409	12.0	26.7	0.081																		
Total Oxygen Injected Per Day (lb)			56.022										22.095										17.772															
Injection Bank 6	Point 13A	16	29	32.692	24.083	6.0	20.7	0.066	26	29.311	21.592	6.0	20.7	0.055	27	30.068	22.150	5.5	20.2	0.052																		
	Point 13B	26	32	39.406	29.029	10.0	24.7	0.096	31	38.175	28.122	10.0	24.7	0.086	29	36.712	26.308	10.0	24.7	0.075																		
	Point 13C	36	26	34.812	25.645	14.5	29.2	0.100	27	36.151	26.631	14.5	29.2	0.096	25	33.185	24.447	14.0	28.7	0.081																		
	Point 14A	16	29	32.692	24.083																																	

Appendix E

Summary of Groundwater Parameter Data

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2008												Jan-09	Feb-09	Mar-09	Apr-09	May-09	
		Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Jul-06	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08						
pH (SU)																			
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	6.23	--	--	--	--	6.35	--	--	6.14	--	--	6.39	--	--	5.86	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	--	--	--	5.54	--	--	5.86	--	--	6.14	--	--	5.74	--	--	--
OZMW-16I2	OU-1 Union Boulevard	5.25	--	--	--	--	5.08	--	--	5.37	--	--	5.46	--	--	5.06	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	5.65	--	--	--	5.04	--	--	4.99	--	--	5.04	--	--	4.62	--	--	--
OZMW-17S	OU-1 Union Boulevard	6.42	--	6.60	6.59	6.54	6.61	--	6.58	6.48	6.99	6.44	6.92	6.62	6.49	6.38	6.65	6.62	6.62
OZMW-17I	OU-1 Union Boulevard	6.69	--	6.97	6.71	6.67	6.75	--	6.73	6.68	6.78	6.10	6.98	6.82	6.57	6.19	6.31	6.33	6.33
OZMW-17I2	OU-1 Union Boulevard	6.09	--	6.65	6.06	6.03	5.96	--	5.92	6.00	5.77	6.34	5.92	5.80	5.62	5.81	5.90	5.90	5.90
OZMW-17D	OU-1 Union Boulevard	--	5.31	5.73	5.44	5.36	5.28	--	5.35	5.28	6.07	6.00	5.77	5.40	5.33	5.12	5.44	5.19	5.19
OZMW-18S	OU-1 Union Boulevard	6.34	--	--	--	--	6.25	--	--	5.78	--	--	6.38	--	--	5.86	--	--	--
OZMW-18I	OU-1 Union Boulevard	6.55	--	--	--	--	6.37	--	--	5.84	--	--	6.50	--	--	6.05	--	--	--
OZMW-18I2	OU-1 Union Boulevard	6.35	--	--	--	--	6.46	--	--	7.76	--	--	6.43	--	--	6.07	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	5.83	--	--	--	6.14	--	--	5.71	--	--	5.91	--	--	5.27	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																			
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	0.440	--	--	--	--	0.822	--	--	0.968	--	--	0.551	--	--	0.710	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	--	--	--	0.725	--	--	0.938	--	--	0.630	--	--	0.780	--	--	--
OZMW-16I2	OU-1 Union Boulevard	0.296	--	--	--	--	0.509	--	--	0.812	--	--	0.999	--	--	0.750	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	1.890	--	--	--	2.220	--	--	2.010	--	--	6.690	--	--	2.100	--	--	--
OZMW-17S	OU-1 Union Boulevard	0.587	--	0.742	0.720	0.693	0.999	--	0.532	0.560	0.871	1.000	1.130	1.210	1.100	1.320	0.098	0.092	0.092
OZMW-17I	OU-1 Union Boulevard	0.689	--	0.504	0.618	0.628	0.999	--	0.493	0.370	0.505	0.568	0.785	0.672	0.717	0.607	0.690	0.688	0.688
OZMW-17I2	OU-1 Union Boulevard	0.237	--	0.147	0.180	0.174	0.345	--	0.184	0.192	0.319	0.357	0.900	0.366	0.350	0.392	0.857	0.558	0.558
OZMW-17D	OU-1 Union Boulevard	--	0.994	1.210	0.878	0.826	1.460	--	0.810	0.588	0.876	0.858	1.270	0.720	0.805	0.849	0.959	0.940	0.940
OZMW-18S	OU-1 Union Boulevard	0.405	--	--	--	--	0.826	--	--	0.678	--	--	0.675	--	--	1.300	--	--	--
OZMW-18I	OU-1 Union Boulevard	0.496	--	--	--	--	0.595	--	--	0.531	--	--	0.496	--	--	0.626	--	--	--
OZMW-18I2	OU-1 Union Boulevard	0.482	--	--	--	--	0.790	--	--	0.949	--	--	0.879	--	--	0.686	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	1.760	--	--	--	1.580	--	--	1.790	--	--	4.100	--	--	2.020	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																			
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	0.0	--	--	--	--	20.0	--	--	20.0	--	--	20.0	--	--	32.0	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	--	--	--	20.0	--	--	20.0	--	--	20.0	--	--	44.0	--	--	--
OZMW-16I2	OU-1 Union Boulevard	0.0	--	--	--	--	1.4	--	--	0.0	--	--	0.0	--	--	1.9	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	0.0	--	--	--	0.0	--	--	0.0	--	--	0.0	--	--	0.0	--	--	--
OZMW-17S	OU-1 Union Boulevard	0.0	--	14.0	22.0	21.0	20.0	--	19.0	8.0	3.0	6.0	3.0	1.0	18.0	20.0	17.0	15.0	15.0
OZMW-17I	OU-1 Union Boulevard	0.0	--	6.0	35.0	21.0	20.0	--	19.0	24.0	25.0	28.0	1.7	0.0	1.8	26.0	14.0	13.0	13.0
OZMW-17I2	OU-1 Union Boulevard	0.0	--	0.0	5.0	5.0	7.4	--	7.0	5.0	3.0	3.0	2.0	0.0	0.0	2.2	0.0	0.0	0.0
OZMW-17D	OU-1 Union Boulevard	--	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
OZMW-18S	OU-1 Union Boulevard	0.0	--	--	--	--	17.4	--	--	20.0	--	--	9.4	--	--	31.0	--	--	--
OZMW-18I	OU-1 Union Boulevard	0.0	--	--	--	--	0.0	--	--	4.6	--	--	0.8	--	--	1.5	--	--	--
OZMW-18I2	OU-1 Union Boulevard	0.0	--	--	--	--	0.0	--	--	8.8	--	--	0.0	--	--	0.0	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	0.0	--	--	--	0.0	--	--	0.0	--	--	0.0	--	--	0.0	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																			
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2008												Jan-09	Feb-09	Mar-09	Apr-09	May-09
		Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Jul-06	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08					
pH (SU)																		
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	11.0	--	--	--	--	18.4	--	--	18.9	--	--	14.3	--	--	10.6	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	--	--	--	15.7	--	--	16.2	--	--	14.2	--	--	12.5	--	--
OZMW-16I2	OU-1 Union Boulevard	12.7	--	--	--	--	15.5	--	--	16.1	--	--	13.3	--	--	12.8	--	--
OZMW-16D	OU-1 Union Boulevard	--	12.6	--	--	--	13.6	--	--	15.6	--	--	13.3	--	--	12.4	--	--
OZMW-17S	OU-1 Union Boulevard	10.9	--	12.6	14.6	18.1	19.0	--	19.8	19.4	17.9	15.6	12.6	10.8	11.2	10.9	12.2	14.1
OZMW-17I	OU-1 Union Boulevard	13.0	--	13.7	15.7	16.3	17.5	--	17.2	16.4	15.9	14.7	13.9	12.5	13.7	13.0	13.0	13.6
OZMW-17I2	OU-1 Union Boulevard	12.9	--	13.7	15.5	17.3	15.4	--	17.3	15.3	15.2	14.5	13.1	12.4	13.0	12.3	13.5	13.8
OZMW-17D	OU-1 Union Boulevard	--	11.9	14.1	15.7	17.0	15.6	--	16.9	15.7	14.2	13.3	12.1	12.3	13.1	12.5	13.4	13.8
OZMW-18S	OU-1 Union Boulevard	9.4	--	--	--	--	18.0	--	--	20.6	--	--	13.9	--	--	10.6	--	--
OZMW-18I	OU-1 Union Boulevard	11.9	--	--	--	--	16.6	--	--	17.6	--	--	14.8	--	--	12.5	--	--
OZMW-18I2	OU-1 Union Boulevard	12.5	--	--	--	--	15.7	--	--	23.5	--	--	14.1	--	--	12.9	--	--
OZMW-18D	OU-1 Union Boulevard	--	11.7	--	--	--	14.7	--	--	17.1	--	--	13.9	--	--	13.0	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																		
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	-108	--	--	--	--	138	--	--	76	--	--	139	--	--	109	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	--	--	--	224	--	--	113	--	--	180	--	--	121	--	--
OZMW-16I2	OU-1 Union Boulevard	86	--	--	--	--	189	--	--	109	--	--	84	--	--	31	--	--
OZMW-16D	OU-1 Union Boulevard	--	-48	--	--	--	73	--	--	43	--	--	83	--	--	67	--	--
OZMW-17S	OU-1 Union Boulevard	-137	--	144	58	76	42	--	49	-34	12	-28	-61	-23	46	70	78	62
OZMW-17I	OU-1 Union Boulevard	-144	--	35	89	77	58	--	62	16	104	47	-23	-85	-17	87	57	52
OZMW-17I2	OU-1 Union Boulevard	110	--	106	127	122	179	--	144	114	149	51	107	-10	53	94	157	104
OZMW-17D	OU-1 Union Boulevard	--	13	36	17	-34	26	--	21	35	-38	-76	69	7	24	79	55	61
OZMW-18S	OU-1 Union Boulevard	-112	--	--	--	--	-40	--	--	0	--	--	31	--	--	64	--	--
OZMW-18I	OU-1 Union Boulevard	-168	--	--	--	--	-61	--	--	-46	--	--	-66	--	--	-75	--	--
OZMW-18I2	OU-1 Union Boulevard	-54	--	--	--	--	-52	--	--	-25	--	--	-92	--	--	-132	--	--
OZMW-18D	OU-1 Union Boulevard	--	-93	--	--	--	-109	--	--	-114	--	--	-64	--	--	-46	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2009							2010					
		Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10
pH (SU)														
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	6.41	--	--	6.57	--	6.56	--	6.37	6.26	5.49	6.31	5.78	6.42
OZMW-16I	OU-1 Union Boulevard	5.44	--	--	6.08	--	6.46	--	6.31	6.46	6.90	6.93	6.58	6.10
OZMW-16I2	OU-1 Union Boulevard	5.86	--	--	5.68	--	5.69	--	5.66	5.34	5.16	5.51	5.94	6.27
OZMW-16D	OU-1 Union Boulevard	4.98	--	--	5.12	--	5.21	--	5.10	5.22	5.22	5.36	4.71	4.30
OZMW-17S	OU-1 Union Boulevard	7.26	6.61	6.62	6.40	6.93	6.16	6.53	6.60	6.56	5.52	6.56	6.54	6.42
OZMW-17I	OU-1 Union Boulevard	6.70	6.36	6.48	6.14	6.83	6.33	5.76	6.59	6.77	5.59	6.68	7.00	6.65
OZMW-17I2	OU-1 Union Boulevard	5.92	5.93	6.10	5.66	6.41	5.04	5.22	5.80	6.26	5.41	6.61	6.60	6.33
OZMW-17D	OU-1 Union Boulevard	5.78	5.33	5.50	5.03	5.56	5.98	6.06	4.98	5.22	5.06	4.98	5.24	5.13
OZMW-18S	OU-1 Union Boulevard	5.80	--	--	6.23	--	6.18	--	5.90	5.92	4.88	6.49	6.18	6.62
OZMW-18I	OU-1 Union Boulevard	6.66	--	--	6.73	--	7.20	--	6.77	6.36	5.60	6.95	6.42	6.14
OZMW-18I2	OU-1 Union Boulevard	6.64	--	--	6.89	--	6.54	--	6.31	5.26	4.88	6.27	5.64	6.00
OZMW-18D	OU-1 Union Boulevard	6.52	--	--	5.83	--	6.55	--	5.50	5.64	4.78	5.88	5.24	4.92
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)														
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	0.450	--	--	0.569	--	0.487	--	0.809	0.822	0.775	0.459	0.410	0.490
OZMW-16I	OU-1 Union Boulevard	0.504	--	--	0.479	--	0.618	--	0.576	0.638	0.870	0.626	0.570	0.659
OZMW-16I2	OU-1 Union Boulevard	0.603	--	--	0.579	--	0.541	--	0.620	0.408	0.506	0.383	0.412	0.618
OZMW-16D	OU-1 Union Boulevard	1.130	--	--	0.386	--	0.445	--	2.840	0.381	0.458	0.415	0.298	0.228
OZMW-17S	OU-1 Union Boulevard	0.809	0.727	0.625	0.750	0.669	0.662	0.760	0.999	0.766	0.999	0.715	0.686	0.492
OZMW-17I	OU-1 Union Boulevard	0.489	0.481	0.487	0.656	0.566	0.565	0.499	0.541	0.589	0.815	0.755	0.619	0.496
OZMW-17I2	OU-1 Union Boulevard	0.360	0.346	0.373	0.502	0.405	0.358	0.392	0.497	0.435	0.678	0.491	0.479	0.386
OZMW-17D	OU-1 Union Boulevard	1.160	0.744	0.784	1.570	1.100	1.090	1.040	1.070	0.999	1.140	1.140	0.910	0.692
OZMW-18S	OU-1 Union Boulevard	0.567	--	--	0.403	--	0.466	--	0.453	1.870	0.676	0.479	0.468	0.572
OZMW-18I	OU-1 Union Boulevard	0.580	--	--	0.639	--	0.629	--	0.557	0.872	0.856	0.580	0.561	0.689
OZMW-18I2	OU-1 Union Boulevard	0.571	--	--	0.518	--	0.509	--	0.502	0.425	0.502	0.335	0.291	0.445
OZMW-18D	OU-1 Union Boulevard	1.590	--	--	1.610	--	1.480	--	1.260	1.500	1.330	1.220	0.970	1.050
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)														
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	16.9	--	--	20.0	--	25.0	--	20.0	16.4	26.0	32.0	26.0	29.0
OZMW-16I	OU-1 Union Boulevard	19.6	--	--	20.0	--	32.0	--	32.0	40.0	36.0	30.0	28.0	30.0
OZMW-16I2	OU-1 Union Boulevard	0.0	--	--	0.0	--	0.0	--	2.7	3.1	0.0	0.0	0.0	0.0
OZMW-16D	OU-1 Union Boulevard	0.0	--	--	0.0	--	0.0	--	0.0	0.0	1.7	0.0	0.0	0.0
OZMW-17S	OU-1 Union Boulevard	3.0	12.0	13.0	15.0	12.4	15.0	20.0	17.2	17.0	18.0	19.0	19.0	20.0
OZMW-17I	OU-1 Union Boulevard	9.4	16.0	15.0	20.0	15.0	15.0	18.0	28.0	28.0	28.0	32.0	24.0	28.0
OZMW-17I2	OU-1 Union Boulevard	2.0	2.0	6.0	4.0	1.0	2.0	7.0	7.5	8.0	13.0	12.0	15.0	5.0
OZMW-17D	OU-1 Union Boulevard	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
OZMW-18S	OU-1 Union Boulevard	19.8	--	--	16.8	--	16.0	--	28.0	28.0	28.0	32.0	18.5	28.0
OZMW-18I	OU-1 Union Boulevard	0.0	--	--	7.3	--	3.6	--	14.0	20.0	20.0	21.0	23.0	26.0
OZMW-18I2	OU-1 Union Boulevard	0.0	--	--	0.0	--	0.0	--	3.0	9.0	8.2	10.0	1.7	8.3
OZMW-18D	OU-1 Union Boulevard	0.0	--	--	0.0	--	0.0	--	0.0	0.0	0.0	0.0	0.0	0.0
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)														
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2009							2010					
		Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10
pH (SU)														
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	15.0	--	--	18.4	--	15.1	--	11.3	10.5	10.7	12.7	12.4	15.0
OZMW-16I	OU-1 Union Boulevard	14.3	--	--	15.6	--	14.5	--	12.4	12.4	12.7	14.2	13.9	14.4
OZMW-16I2	OU-1 Union Boulevard	14.8	--	--	16.6	--	14.0	--	10.2	11.8	12.8	14.3	12.8	14.5
OZMW-16D	OU-1 Union Boulevard	14.3	--	--	15.3	--	13.8	--	11.7	11.1	12.9	14.3	13.7	14.8
OZMW-17S	OU-1 Union Boulevard	16.7	18.7	18.9	18.7	16.4	15.1	13.7	10.9	10.4	10.4	13.0	4.7	3.9
OZMW-17I	OU-1 Union Boulevard	15.1	16.7	17.0	16.4	14.9	14.7	12.6	12.7	11.8	11.9	13.7	14.8	3.5
OZMW-17I2	OU-1 Union Boulevard	15.5	18.1	17.2	17.0	14.5	14.3	12.8	12.1	11.0	12.5	14.4	5.2	4.0
OZMW-17D	OU-1 Union Boulevard	15.0	18.5	16.8	15.4	14.1	13.7	10.1	11.9	10.9	12.3	14.1	17.0	3.5
OZMW-18S	OU-1 Union Boulevard	14.5	--	--	18.4	--	15.8	--	9.6	9.5	10.3	11.9	11.9	14.3
OZMW-18I	OU-1 Union Boulevard	13.9	--	--	15.5	--	15.1	--	12.6	12.5	12.6	13.3	13.2	14.3
OZMW-18I2	OU-1 Union Boulevard	14.5	--	--	16.1	--	13.9	--	12.5	12.2	12.9	14.1	12.8	14.7
OZMW-18D	OU-1 Union Boulevard	14.2	--	--	16.1	--	13.7	--	12.2	12.1	12.6	14.1	13.9	14.8
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)														
OU2MW-57S	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-57I2	66 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--
OZMW-16S	OU-1 Union Boulevard	123	--	--	74	--	244	--	161	152	131	108	191	171
OZMW-16I	OU-1 Union Boulevard	207	--	--	94	--	202	--	351	192	16	90	193	220
OZMW-16I2	OU-1 Union Boulevard	86	--	--	20	--	59	--	60	121	61	32	57	-33
OZMW-16D	OU-1 Union Boulevard	127	--	--	54	--	92	--	97	106	115	-37	85	97
OZMW-17S	OU-1 Union Boulevard	-11	73	51	60	29	77	70	63	77	68	65	50	46
OZMW-17I	OU-1 Union Boulevard	30	213	60	111	41	70	297	172	139	115	120	110	187
OZMW-17I2	OU-1 Union Boulevard	120	189	-16	138	-73	140	157	190	144	137	50	146	114
OZMW-17D	OU-1 Union Boulevard	80	103	-102	98	-42	70	136	103	89	52	78	90	39
OZMW-18S	OU-1 Union Boulevard	168	--	--	58	--	121	--	172	150	104	107	155	107
OZMW-18I	OU-1 Union Boulevard	-42	--	--	-27	--	0	--	54	93	139	79	100	102
OZMW-18I2	OU-1 Union Boulevard	-77	--	--	-152	--	-121	--	-21	206	75	69	180	139
OZMW-18D	OU-1 Union Boulevard	-32	--	--	-49	--	10	--	17	-11	-9	-48	-17	-31
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2010						2011										
		Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11
pH (SU)																		
OU2MW-57S	66 North Clinton	--	--	6.29	6.16	--	--	--	6.11	--	--	5.75	--	--	5.60	--	5.75	--
OU2MW-57I	66 North Clinton	--	--	5.72	5.78	--	--	--	5.93	--	--	5.35	--	--	5.92	--	5.62	--
OU2MW-57I2	66 North Clinton	--	--	5.83	5.73	--	--	--	6.02	--	--	5.50	--	--	5.70	--	5.40	--
OZMW-16S	OU-1 Union Boulevard	--	7.01	--	6.41	--	--	7.12	--	--	--	6.03	--	--	6.59	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	6.65	--	6.88	--	--	6.64	--	--	--	6.84	--	--	6.75	--	--	--
OZMW-16I2	OU-1 Union Boulevard	--	5.43	--	6.69	--	--	7.20	--	--	--	5.70	--	--	7.30	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	5.39	--	5.05	--	--	4.69	--	--	--	5.95	--	--	5.15	--	--	--
OZMW-17S	OU-1 Union Boulevard	6.61	6.98	6.34	7.06	7.11	6.13	6.57	7.29	ER	6.26	12.22	6.74	6.65	7.14	6.25	6.17	6.11
OZMW-17I	OU-1 Union Boulevard	6.95	6.76	6.58	7.05	5.87	6.51	6.73	7.86	6.46	5.97	7.09	6.61	6.97	7.57	6.44	6.52	6.18
OZMW-17I2	OU-1 Union Boulevard	6.05	6.89	5.98	5.88	6.69	5.55	6.31	6.77	ER	5.91	7.18	6.10	6.35	6.51	5.45	5.31	4.97
OZMW-17D	OU-1 Union Boulevard	5.14	5.79	5.02	5.80	4.36	6.08	5.23	5.53	5.04	5.07	11.06	5.55	5.45	5.25	6.21	4.64	4.69
OZMW-18S	OU-1 Union Boulevard	--	5.52	--	6.77	--	--	7.18	--	--	--	6.47	--	--	6.86	--	--	--
OZMW-18I	OU-1 Union Boulevard	--	7.69	--	6.64	--	--	6.79	--	--	--	6.17	--	--	6.94	--	--	--
OZMW-18I2	OU-1 Union Boulevard	--	5.03	--	5.87	--	--	6.78	--	--	--	6.95	--	--	6.42	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	5.98	--	5.02	--	--	5.73	--	--	--	5.26	--	--	7.77	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	ER	--	5.87	--	--	5.83	--	5.72	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	ER	--	5.49	--	--	6.00	--	5.84	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	ER	--	4.85	--	--	5.10	--	3.50	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	ER	--	5.35	--	--	5.46	--	7.00	--
Conductivity (mS/cm)																		
OU2MW-57S	66 North Clinton	--	--	0.179	0.535	--	--	--	0.896	--	--	0.385	--	--	0.453	--	0.662	--
OU2MW-57I	66 North Clinton	--	--	0.378	0.324	--	--	--	0.417	--	--	0.240	--	--	0.412	--	0.807	--
OU2MW-57I2	66 North Clinton	--	--	0.372	0.345	--	--	--	0.432	--	--	0.538	--	--	1.040	--	0.837	--
OZMW-16S	OU-1 Union Boulevard	--	0.372	--	0.277	--	--	0.348	--	--	--	0.600	--	--	0.497	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	1.020	--	0.583	--	--	0.740	--	--	--	0.673	--	--	0.717	--	--	--
OZMW-16I2	OU-1 Union Boulevard	--	1.050	--	0.527	--	--	0.459	--	--	--	0.558	--	--	0.482	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	0.197	--	0.152	--	--	0.209	--	--	--	0.229	--	--	0.579	--	--	--
OZMW-17S	OU-1 Union Boulevard	0.398	0.375	0.431	0.379	0.341	0.479	0.690	0.680	1.320	0.877	1.505	0.565	0.580	0.478	0.593	0.703	0.589
OZMW-17I	OU-1 Union Boulevard	0.413	0.422	0.493	0.399	0.406	0.396	0.628	0.556	0.944	0.730	0.629	0.602	0.659	0.510	0.729	0.837	0.698
OZMW-17I2	OU-1 Union Boulevard	0.333	0.355	0.344	0.284	0.245	0.324	0.428	0.359	0.787	0.528	0.430	0.377	0.307	0.396	0.490	0.635	0.526
OZMW-17D	OU-1 Union Boulevard	0.532	0.623	0.518	0.415	0.374	0.337	0.465	0.322	0.555	0.451	0.872	0.363	0.522	0.221	0.315	0.323	0.280
OZMW-18S	OU-1 Union Boulevard	--	0.742	--	0.358	--	--	0.497	--	--	--	0.467	--	--	0.613	--	--	--
OZMW-18I	OU-1 Union Boulevard	--	0.685	--	0.590	--	--	0.696	--	--	--	0.718	--	--	0.676	--	--	--
OZMW-18I2	OU-1 Union Boulevard	--	0.660	--	0.384	--	--	0.332	--	--	--	0.400	--	--	0.548	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	0.968	--	0.731	--	--	0.743	--	--	--	0.878	--	--	0.547	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.275	--	0.204	--	--	0.215	--	0.260	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.390	--	0.595	--	--	0.555	--	0.717	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.334	--	0.204	--	--	0.525	--	0.468	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.510	--	0.500	--	--	0.386	--	0.363	--
Dissolved Oxygen (mg/L)																		
OU2MW-57S	66 North Clinton	--	--	0.0	0.0	--	--	--	0.0	--	--	0.4	--	--	1.9	--	1.6	--
OU2MW-57I	66 North Clinton	--	--	3.2	5.0	--	--	--	9.1	--	--	2.8	--	--	0.0	--	6.9	--
OU2MW-57I2	66 North Clinton	--	--	0.0	0.0	--	--	--	1.8	--	--	0.4	--	--	3.1	--	2.7	--
OZMW-16S	OU-1 Union Boulevard	--	30.0	--	27.0	--	--	26.0	--	--	--	25.0	--	--	26.0	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	28.8	--	25.0	--	--	29.0	--	--	--	24.0	--	--	37.0	--	--	--
OZMW-16I2	OU-1 Union Boulevard	--	0.0	--	0.0	--	--	0.0	--	--	--	0.6	--	--	0.0	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	0.1	--	0.0	--	--	0.0	--	--	--	0.0	--	--	0.0	--	--	--
OZMW-17S	OU-1 Union Boulevard	14.0	15.0	13.0	15.0	15.0	16.0	17.0	23.0	11.0	13.0	38.9	19.0	22.0	20.0	23.0	18.0	18.0
OZMW-17I	OU-1 Union Boulevard	27.0	25.0	28.0	29.0	26.0	27.0	22.0	32.0	28.0	47.0	24.0	22.0	31.0	24.0	32.0	26.0	22.0
OZMW-17I2	OU-1 Union Boulevard	7.0	6.0	5.0	4.0	3.0	0.0	7.0	7.0	5.0	14.0	5.0	5.0	12.0	9.0	6.0	8.0	7.0
OZMW-17D	OU-1 Union Boulevard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.8	1.0	1.0	0.0	1.0	2.0	3.0
OZMW-18S	OU-1 Union Boulevard	--	17.3	--	23.0	--	--	22.0	--	--	--	27.0	--	--	30.0	--	--	--
OZMW-18I	OU-1 Union Boulevard	--	20.0	--	14.7	--	--	24.0	--	--	--	15.8	--	--	19.0	--	--	--
OZMW-18I2	OU-1 Union Boulevard	--	6.3	--	5.8	--	--	5.0	--	--	--	11.2	--	--	9.8	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	0.1	--	0.0	--	--	0.0	--	--	--	11.0	--	--	0.0	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.7	--	0.0	--	--	17.6	--	38.0	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.0	--	0.4	--	--	0.0	--	2.6	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	3.6	--	6.6	--	--	0.0	--	0.0	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	0.1	--	0.4	--	--	1.7	--	0.0	--
Temperature (degrees Celcius)																		
OU2MW-57S	66 North Clinton	--	--	20.3	20.2	--	--	--	11.2	--	--	12.5	--	--	22.7	--	20.3	--
OU2MW-57I	66 North Clinton	--	--	17.1	18.0	--	--	--	13.0	--	--	13.6	--	--	16.6	--	17.2	--

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Well ID	Oxygen Injection System	2010						2011										
		Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11
pH (SU)																		
OU2MW-57I2	66 North Clinton	--	--	19.4	18.0	--	--	--	13.6	--	--	13.5	--	--	16.1	--	16.4	--
OZMW-16S	OU-1 Union Boulevard	--	18.1	--	16.8	--	--	12.1	--	--	13.4	--	--	17.9	--	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	17.3	--	15.0	--	--	13.2	--	--	14.3	--	--	18.0	--	--	--	--
OZMW-16I2	OU-1 Union Boulevard	--	17.1	--	14.8	--	--	12.1	--	--	13.7	--	--	15.1	--	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	17.2	--	14.4	--	--	11.9	--	--	16.3	--	--	15.1	--	--	--	--
OZMW-17S	OU-1 Union Boulevard	19.3	19.2	20.2	17.8	16.2	14.3	10.2	9.7	10.9	13.5	27.6	16.6	17.6	20.0	18.5	17.9	15.7
OZMW-17I	OU-1 Union Boulevard	17.5	17.0	17.9	15.9	15.7	13.5	12.6	12.1	13.0	12.0	15.5	15.3	16.1	16.4	15.4	15.4	14.7
OZMW-17I2	OU-1 Union Boulevard	18.9	18.7	17.3	15.2	14.4	13.0	12.0	12.0	12.7	14.3	15.4	15.4	15.1	16.3	10.4	14.5	14.2
OZMW-17D	OU-1 Union Boulevard	19.1	20.4	17.1	14.7	14.4	11.6	11.9	11.6	12.7	13.6	29.6	16.2	14.0	16.4	16.0	14.2	14.1
OZMW-18S	OU-1 Union Boulevard	--	21.2	--	18.2	--	--	12.1	--	--	14.5	--	--	18.6	--	--	--	--
OZMW-18I	OU-1 Union Boulevard	--	17.3	--	16.6	--	--	13.8	--	--	14.8	--	--	22.1	--	--	--	--
OZMW-18I2	OU-1 Union Boulevard	--	17.0	--	15.7	--	--	13.2	--	--	15.0	--	--	17.3	--	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	16.6	--	15.1	--	--	13.4	--	--	16.8	--	--	17.4	--	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	8.9	--	11.9	--	--	21.6	--	17.7	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	11.7	--	13.2	--	--	19.1	--	16.5	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	12.7	--	13.5	--	--	15.6	--	15.0	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	--	11.6	--	12.7	--	--	ER	--	14.3	--
Oxidation Reduction Potential (mV)																		
OU2MW-57S	66 North Clinton	--	--	-118	-101	--	--	--	-86	--	--	-79	--	--	-45	--	-69	--
OU2MW-57I	66 North Clinton	--	--	64	54	--	--	--	129	--	--	179	--	--	110	--	90	--
OU2MW-57I2	66 North Clinton	--	--	69	63	--	--	--	143	--	--	156	--	--	103	--	177	--
OZMW-16S	OU-1 Union Boulevard	--	151	--	189	--	--	167	--	--	187	--	--	-38	--	--	--	--
OZMW-16I	OU-1 Union Boulevard	--	124	--	278	--	--	140	--	--	183	--	--	68	--	--	--	--
OZMW-16I2	OU-1 Union Boulevard	--	-69	--	-74	--	--	-18	--	--	-60	--	--	-100	--	--	--	--
OZMW-16D	OU-1 Union Boulevard	--	131	--	107	--	--	135	--	--	137	--	--	70	--	--	--	--
OZMW-17S	OU-1 Union Boulevard	63	78	63	83	121	58	219	116	91	180	177	85	33	107	25	59	140
OZMW-17I	OU-1 Union Boulevard	123	183	176	123	142	143	141	157	93	200	125	158	124	121	136	97	206
OZMW-17I2	OU-1 Union Boulevard	73	134	157	160	185	130	257	144	88	212	178	154	118	90	130	101	120
OZMW-17D	OU-1 Union Boulevard	71	80	126	58	122	108	51	74	58	52	123	68	25	56	52	46	87
OZMW-18S	OU-1 Union Boulevard	--	127	--	141	--	--	110	--	--	208	--	--	86	--	--	--	--
OZMW-18I	OU-1 Union Boulevard	--	120	--	133	--	--	88	--	--	108	--	--	143	--	--	--	--
OZMW-18I2	OU-1 Union Boulevard	--	128	--	117	--	--	69	--	--	180	--	--	155	--	--	--	--
OZMW-18D	OU-1 Union Boulevard	--	-10	--	59	--	--	-2	--	--	-33	--	--	-31	--	--	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	-85	--	-66	--	--	93	--	123	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	97	--	155	--	--	60	--	41	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	39	--	108	--	--	190	--	142	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	--	--	--	--	-77	--	-15	--	--	-31	--	-57	--	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2012												
		Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
pH (SU)														
OU2MW-57S	66 North Clinton	--	--	--	6.30	--	--	6.46	--	5.91	--	--	6.09	--
OU2MW-57I	66 North Clinton	--	--	--	6.09	--	--	6.04	--	5.69	--	--	5.92	--
OU2MW-57I2	66 North Clinton	--	--	--	5.43	--	--	6.02	--	5.79	--	--	6	--
OZMW-16S	OU-1 Union Boulevard	6.00	--	--	6.80	5.77	--	--	--	7.03	--	--	--	6.75
OZMW-16I	OU-1 Union Boulevard	6.15	--	--	6.32	5.76	--	--	--	6.84	--	--	--	6.81
OZMW-16I2	OU-1 Union Boulevard	5.34	--	--	6.24	6.45	--	--	--	5.7	--	--	--	6.52
OZMW-16D	OU-1 Union Boulevard	4.55	--	--	4.37	5.39	--	--	--	4.77	--	--	--	5
OZMW-17S	OU-1 Union Boulevard	6.25	6.74	7.00	6.76	6.67	6.86	6.55	6.34	6.76	6.71	6.51	6.52	6.62
OZMW-17I	OU-1 Union Boulevard	6.50	7.08	7.30	7.17	6.84	7.24	6.39	7.27	7.31	7.02	6.85	6.79	6.81
OZMW-17I2	OU-1 Union Boulevard	5.44	5.72	5.96	5.75	5.71	5.83	5.87	5.73	5.71	5.97	5.51	5.68	5.56
OZMW-17D	OU-1 Union Boulevard	4.80	5.62	5.50	5.29	5.60	5.34	5.97	5.28	5.2	5.48	--	5.29	5.47
OZMW-18S	OU-1 Union Boulevard	6.44	--	--	6.90	5.93	--	--	--	7.1	--	--	--	6.68
OZMW-18I	OU-1 Union Boulevard	6.63	--	--	6.39	6.86	--	--	--	6.97	--	--	--	6.95
OZMW-18I2	OU-1 Union Boulevard	5.85	--	--	6.61	6.00	--	--	--	6.51	--	--	--	6.39
OZMW-18D	OU-1 Union Boulevard	5.37	--	--	5.37	5.9	--	--	--	5.94	--	--	--	6.68
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	5.65	--	6.31	--	--	--	--	--	6.28	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	5.35	--	5.80	--	--	--	--	--	5.68	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	5.50	--	5.41	--	--	--	--	--	5.31	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	5.72	--	5.35	--	--	--	--	--	5.36	--
Conductivity (mS/cm)														
OU2MW-57S	66 North Clinton	--	--	--	0.469	--	--	0.368	--	0.326	--	--	0.311	--
OU2MW-57I	66 North Clinton	--	--	--	0.510	--	--	0.356	--	0.300	--	--	0.432	--
OU2MW-57I2	66 North Clinton	--	--	--	0.582	--	--	0.537	--	0.426	--	--	0.412	--
OZMW-16S	OU-1 Union Boulevard	0.394	--	--	0.435	0.427	--	--	--	0.338	--	--	--	0.379
OZMW-16I	OU-1 Union Boulevard	0.763	--	--	0.788	0.659	--	--	--	0.621	--	--	--	0.701
OZMW-16I2	OU-1 Union Boulevard	0.299	--	--	0.487	0.950	--	--	--	0.320	--	--	--	0.505
OZMW-16D	OU-1 Union Boulevard	0.299	--	--	0.280	0.207	--	--	--	0.157	--	--	--	0.216
OZMW-17S	OU-1 Union Boulevard	0.495	0.457	0.499	0.465	0.473	0.476	0.608	0.709	0.358	0.448	0.372	0.480	0.405
OZMW-17I	OU-1 Union Boulevard	0.700	0.580	0.635	0.630	0.645	0.638	0.773	0.695	0.499	0.637	0.522	0.715	0.607
OZMW-17I2	OU-1 Union Boulevard	0.496	0.405	0.422	0.396	0.378	0.403	0.510	0.506	0.394	0.518	0.412	0.568	0.484
OZMW-17D	OU-1 Union Boulevard	0.269	0.225	0.284	0.328	0.352	0.312	0.297	0.269	0.158	0.210	--	0.242	0.204
OZMW-18S	OU-1 Union Boulevard	0.602	--	--	0.462	0.518	--	--	--	0.420	--	--	--	0.369
OZMW-18I	OU-1 Union Boulevard	0.674	--	--	0.750	1.20	--	--	--	0.525	--	--	--	0.578
OZMW-18I2	OU-1 Union Boulevard	0.570	--	--	0.430	0.544	--	--	--	0.521	--	--	--	0.520
OZMW-18D	OU-1 Union Boulevard	0.593	--	--	0.745	1.28	--	--	--	0.469	--	--	--	0.511
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	0.424	--	0.377	--	--	0.182	--	--	0.167	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	0.540	--	0.400	--	--	0.456	--	--	0.405	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	0.301	--	0.298	--	--	0.250	--	--	0.376	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	0.422	--	0.465	--	--	0.310	--	--	0.358	--
Dissolved Oxygen (mg/L)														
OU2MW-57S	66 North Clinton	--	--	--	6.3	--	--	0.0	--	0.0	--	--	0.0	--
OU2MW-57I	66 North Clinton	--	--	--	5.8	--	--	0.0	--	0.0	--	--	6.2	--
OU2MW-57I2	66 North Clinton	--	--	--	2.1	--	--	0.0	--	0.0	--	--	0.0	--
OZMW-16S	OU-1 Union Boulevard	25.0	--	--	39.0	22.0	--	--	--	32.0	--	--	--	32.0
OZMW-16I	OU-1 Union Boulevard	34.0	--	--	36.0	25.0	--	--	--	36.0	--	--	--	37.0
OZMW-16I2	OU-1 Union Boulevard	1.6	--	--	0.8	0.0	--	--	--	1.6	--	--	--	3.5
OZMW-16D	OU-1 Union Boulevard	5.0	--	--	1.8	0.0	--	--	--	0.0	--	--	--	0.7
OZMW-17S	OU-1 Union Boulevard	17.0	21.0	20.0	26.0	21.0	23.0	29.0	4.0	32.0	25.0	23.0	22.0	23.0
OZMW-17I	OU-1 Union Boulevard	24.0	24.0	30.0	27.0	23.0	26.0	34.0	27.0	36.0	35.0	33.0	35.0	27.0
OZMW-17I2	OU-1 Union Boulevard	7.0	5.0	2.0	2.0	2.0	5.0	4.0	8.0	27.0	5.0	4.0	6.0	3.0
OZMW-17D	OU-1 Union Boulevard	2.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.6
OZMW-18S	OU-1 Union Boulevard	30.0	--	--	36.0	23.0	--	--	--	19.2	--	--	--	38.0
OZMW-18I	OU-1 Union Boulevard	17.8	--	--	23.0	18.9	--	--	--	19.5	--	--	--	16.3
OZMW-18I2	OU-1 Union Boulevard	7.2	--	--	11.4	12.3	--	--	--	3.5	--	--	--	3.8
OZMW-18D	OU-1 Union Boulevard	1.4	--	--	3.8	0.0	--	--	--	0.0	--	--	--	0.2
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	29.0	--	23.0	--	--	23.0	--	--	18.6	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	1.9	--	2.5	--	--	0.0	--	--	0.0	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	0.6	--	0.0	--	--	0.1	--	--	0.9	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	7.5	--	3.2	--	--	0.0	--	--	0.0	--
Temperature (degrees Celcius)														
OU2MW-57S	66 North Clinton	--	--	--	12.7	--	--	18.6	--	22.5	--	--	15.2	--
OU2MW-57I	66 North Clinton	--	--	--	13.6	--	--	16.2	--	18.3	--	--	14.6	--

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 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2012												
		Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
pH (SU)														
OU2MW-57I2	66 North Clinton	--	--	--	13.3	--	--	16.3	--	18.0	--	--	13.6	--
OZMW-16S	OU-1 Union Boulevard	14.6	--	--	11.6	13.1	--	--	--	20.5	--	--	--	13.4
OZMW-16I	OU-1 Union Boulevard	14.3	--	--	12.3	13.3	--	--	--	18.5	--	--	--	13.3
OZMW-16I2	OU-1 Union Boulevard	13.5	--	--	12.5	13.9	--	--	--	17.3	--	--	--	13.5
OZMW-16D	OU-1 Union Boulevard	12.9	--	--	11.9	12.6	--	--	--	17.3	--	--	--	12.0
OZMW-17S	OU-1 Union Boulevard	14.6	12.3	12.3	12.6	13.8	17.1	20.0	21.7	20.0	18.7	18.1	14.4	13.0
OZMW-17I	OU-1 Union Boulevard	14.3	13.2	13.7	13.8	14.5	17	18.8	18.0	17.5	15.9	16.2	13.9	14.3
OZMW-17I2	OU-1 Union Boulevard	12.3	13.0	13.3	13.4	14.1	17.1	17.9	16.1	17.3	15.4	15.6	13.8	12.8
OZMW-17D	OU-1 Union Boulevard	12.8	12.3	12.9	13.1	13.5	17.4	17.0	17.1	17.3	14.1	--	12.7	12.9
OZMW-18S	OU-1 Union Boulevard	15.5	--	--	12.0	13.6	--	--	--	19.1	--	--	--	13.8
OZMW-18I	OU-1 Union Boulevard	14.9	--	--	12.7	14.4	--	--	--	17.5	--	--	--	14.2
OZMW-18I2	OU-1 Union Boulevard	14.1	--	--	13.5	14.0	--	--	--	16.9	--	--	--	13.7
OZMW-18D	OU-1 Union Boulevard	13.6	--	--	12.6	14.5	--	--	--	17.1	--	--	--	12.6
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	13.5	--	20.2	--	--	--	--	--	14.0	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	15.5	--	17.7	--	--	--	--	--	14.3	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	16.2	--	17.7	--	--	--	--	--	11.8	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	15.4	--	20.8	--	--	--	--	--	13.0	--
Oxidation Reduction Potential (mV)														
OU2MW-57S	66 North Clinton	--	--	--	-20	--	--	-45	--	-58	--	--	-21	--
OU2MW-57I	66 North Clinton	--	--	--	167	--	--	173	--	143	--	--	148	--
OU2MW-57I2	66 North Clinton	--	--	--	229	--	--	201	--	164	--	--	149	--
OZMW-16S	OU-1 Union Boulevard	191	--	--	128	260	--	--	--	138	--	--	--	176
OZMW-16I	OU-1 Union Boulevard	181	--	--	258	255	--	--	--	163	--	--	--	185
OZMW-16I2	OU-1 Union Boulevard	30	--	--	-15	-9	--	--	--	22	--	--	--	-44
OZMW-16D	OU-1 Union Boulevard	152	--	--	134	130	--	--	--	100	--	--	--	126
OZMW-17S	OU-1 Union Boulevard	170	138	118	134	169	180	146	94	133	87	104	419	167
OZMW-17I	OU-1 Union Boulevard	152	187	140	99	237	203	155	198	146	137	162	407	139
OZMW-17I2	OU-1 Union Boulevard	122	214	103	104	215	177	125	215	189	163	196	383	245
OZMW-17D	OU-1 Union Boulevard	107	56	78	70	79	45	69	59	58	38	--	90	40
OZMW-18S	OU-1 Union Boulevard	185	--	--	146	250	--	--	--	196	--	--	--	149
OZMW-18I	OU-1 Union Boulevard	245	--	--	135	111	--	--	--	225	--	--	--	145
OZMW-18I2	OU-1 Union Boulevard	66	--	--	154	215	--	--	--	61	--	--	--	108
OZMW-18D	OU-1 Union Boulevard	-5	--	--	-58	-49	--	--	--	-59	--	--	--	-60
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	--	292	--	167	--	--	--	--	--	169	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	--	120	--	170	--	--	--	--	--	68	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	--	98	--	164	--	--	--	--	--	125	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	--	48	--	41	--	--	--	--	--	41	--

Appendix E - Table E-1
Summary of Groundwater Parameter Data
OU-1 Oxygen Injection System
Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2013																
		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
pH (SU)																		
OU2MW-57S	66 North Clinton	--	5.57	--	--	6.19	--	5.87	--	--	--	--	5.82	--	5.06	--	6.31	--
OU2MW-57I	66 North Clinton	--	5.28	--	--	5.89	--	5.70	--	--	--	--	5.49	--	5.21	--	5.91	--
OU2MW-57I2	66 North Clinton	--	5.80	--	--	6.08	--	5.91	--	--	--	--	5.67	--	5.53	--	6.00	--
OZMW-16S	OU-1 Union Boulevard	--	6.71	--	--	6.91	--	6.76	--	--	--	--	6.34	--	6.50	--	--	7.13
OZMW-16I	OU-1 Union Boulevard	--	6.74	--	--	6.98	--	7.04	--	--	--	--	6.55	--	6.73	--	--	7.00
OZMW-16I2	OU-1 Union Boulevard	--	6.04	--	--	5.98	--	6.07	--	--	--	--	6.36	--	6.20	--	--	5.80
OZMW-16D	OU-1 Union Boulevard	--	4.95	--	--	4.98	--	4.96	--	--	--	--	4.53	--	4.75	--	--	5.08
OZMW-17S	OU-1 Union Boulevard	6.34	6.51	6.71	--	6.70	--	6.55	6.45	6.55	6.42	6.29	6.53	6.15	7.88	6.17	6.54	6.58
OZMW-17I	OU-1 Union Boulevard	6.57	6.81	6.80	--	6.86	--	6.90	6.90	6.92	6.82	6.65	6.75	6.64	6.94	6.81	6.84	6.70
OZMW-17I2	OU-1 Union Boulevard	5.48	6.14	5.66	--	5.61	--	5.83	5.49	5.51	5.49	5.19	5.21	5.38	5.75	5.84	6.00	6.05
OZMW-17D	OU-1 Union Boulevard	5.11	6.36	5.21	--	5.44	--	5.47	5.22	5.37	5.31	4.94	4.89	5.01	7.20	5.38	5.34	5.26
OZMW-18S	OU-1 Union Boulevard	--	6.78	--	--	6.75	--	7.16	--	--	--	--	6.56	--	--	7.07	--	--
OZMW-18I	OU-1 Union Boulevard	--	6.98	--	--	6.83	--	7.05	--	--	--	--	6.76	--	--	7.22	--	--
OZMW-18I2	OU-1 Union Boulevard	--	6.29	--	--	6.37	--	6.14	--	--	--	--	6.12	5.96	6.06	6.51	6.31	6.67
OZMW-18D	OU-1 Union Boulevard	--	5.90	--	--	5.96	--	6.15	--	--	--	--	5.59	5.27	4.95	6.45	5.30	5.54
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	5.61	--	--	6.04	--	5.96	--	--	--	--	5.81	--	5.20	--	--	6.15
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	5.19	--	--	5.63	--	5.30	--	--	--	--	5.77	--	5.30	--	--	5.66
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	5.04	--	--	5.12	--	5.14	--	--	--	--	4.80	--	4.73	--	--	5.51
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	5.45	--	--	5.50	--	5.14	--	--	--	--	5.14	--	5.01	--	--	5.89
Conductivity (mS/cm)																		
OU2MW-57S	66 North Clinton	--	0.600	--	--	0.301	--	0.398	--	--	--	--	0.881	--	0.408	--	0.280	--
OU2MW-57I	66 North Clinton	--	0.843	--	--	0.323	--	0.350	--	--	--	--	0.593	--	0.481	--	0.411	--
OU2MW-57I2	66 North Clinton	--	0.300	--	--	0.406	--	0.458	--	--	--	--	0.697	--	0.435	--	0.438	--
OZMW-16S	OU-1 Union Boulevard	--	0.950	--	--	0.559	--	0.405	--	--	--	--	0.649	--	0.570	--	--	0.576
OZMW-16I	OU-1 Union Boulevard	--	0.820	--	--	0.81	--	0.740	--	--	--	--	1.090	--	0.784	--	--	0.722
OZMW-16I2	OU-1 Union Boulevard	--	0.524	--	--	0.415	--	0.363	--	--	--	--	1.040	--	0.330	--	--	0.330
OZMW-16D	OU-1 Union Boulevard	--	0.270	--	--	0.233	--	0.217	--	--	--	--	0.315	--	0.233	--	--	0.205
OZMW-17S	OU-1 Union Boulevard	0.462	0.621	0.457	--	0.593	--	0.485	0.546	0.385	0.424	0.667	0.680	0.591	1.270	0.587	0.630	0.562
OZMW-17I	OU-1 Union Boulevard	0.694	0.790	1.050	--	0.735	--	0.694	0.687	0.688	0.682	1.060	1.070	0.739	0.724	0.698	0.779	0.799
OZMW-17I2	OU-1 Union Boulevard	0.566	0.527	0.780	--	0.48	--	0.478	0.542	0.559	0.524	0.930	0.913	0.614	0.604	0.570	0.638	0.583
OZMW-17D	OU-1 Union Boulevard	0.214	0.203	0.313	--	0.265	--	0.204	0.211	0.217	0.206	0.370	0.329	0.234	0.253	0.250	0.273	0.279
OZMW-18S	OU-1 Union Boulevard	--	0.928	--	--	0.44	--	0.379	--	--	--	--	0.691	--	--	0.832	--	--
OZMW-18I	OU-1 Union Boulevard	--	0.665	--	--	0.667	--	0.648	--	--	--	--	1.010	--	--	0.584	--	--
OZMW-18I2	OU-1 Union Boulevard	--	0.694	--	--	0.605	--	0.661	--	--	--	--	0.957	0.967	0.660	0.620	0.585	0.603
OZMW-18D	OU-1 Union Boulevard	--	0.689	--	--	0.526	--	0.564	--	--	--	--	0.873	0.889	0.663	0.698	0.659	0.642
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	0.589	--	--	0.427	--	0.299	--	--	--	--	0.202	--	0.178	--	--	0.245
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	0.808	--	--	0.388	--	0.418	--	--	--	--	0.805	--	0.532	--	--	0.427
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	0.430	--	--	0.535	--	0.497	--	--	--	--	0.748	--	0.508	--	--	0.45
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	0.300	--	--	0.289	--	0.270	--	--	--	--	0.424	--	0.264	--	--	0.20
Dissolved Oxygen (mg/L)																		
OU2MW-57S	66 North Clinton	--	7.1	--	--	6.4	--	3.0	--	--	--	--	3.4	--	7.8	--	1.53	--
OU2MW-57I	66 North Clinton	--	1.9	--	--	0.6	--	1.3	--	--	--	--	2.8	--	1.2	--	1.28	--
OU2MW-57I2	66 North Clinton	--	0.5	--	--	0.3	--	0.5	--	--	--	--	0.3	--	0.5	--	6.60	--
OZMW-16S	OU-1 Union Boulevard	--	27.0	--	--	28.0	--	32.0	--	--	--	--	28.0	--	30.0	--	--	17.0
OZMW-16I	OU-1 Union Boulevard	--	32.0	--	--	46.0	--	29.0	--	--	--	--	40.0	--	35.0	--	--	20.0
OZMW-16I2	OU-1 Union Boulevard	--	2.5	--	--	0.5	--	2.4	--	--	--	--	32.0	--	30.0	--	--	16.6
OZMW-16D	OU-1 Union Boulevard	--	0.6	--	--	0.5	--	0.4	--	--	--	--	0.4	--	0.4	--	--	11.1
OZMW-17S	OU-1 Union Boulevard	11.0	12.0	21.0	--	14.0	--	16.3	17.0	30.0	21.0	15.0	23.0	16.0	15.0	17.0	14.70	18.0
OZMW-17I	OU-1 Union Boulevard	15.0	26.0	39.0	--	28.0	--	21.0	28.0	35.0	32.0	17.0	28.0	23.0	17.0	21.0	15.0	31.0
OZMW-17I2	OU-1 Union Boulevard	7.0	5.0	8.9	--	3.3	--	6.1	7.0	10.0	6.0	3.0	8.0	5.0	4.0	5.0	13.2	9.0
OZMW-17D	OU-1 Union Boulevard	1.0	0.0	0.5	--	0.3	--	0.5	1.0	2.0	0.0	1.0	2.0	1.0	1.9	1.0	0.0	2.7
OZMW-18S	OU-1 Union Boulevard	--	22.0	--	--	29.0	--	31.0	--	--	--	--	21.0	--	--	17.0	--	--
OZMW-18I	OU-1 Union Boulevard	--	15.3	--	--	24.0	--	18.4	--	--	--	--	10.0	--	--	9.0	--	--
OZMW-18I2	OU-1 Union Boulevard	--	4.9	--	--	7.6	--	9.4	--	--	--	--	20.0	21.0	22.0	20.0	15.5	38.0
OZMW-18D	OU-1 Union Boulevard	--	0.6	--	--	0.4	--	0.9	--	--	--	--	2.0	5.0	20.0	21.0	19.0	26.0
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	36.0	--	--	34.0	--	22.0	--	--	--	--	25.0	--	22.0	--	--	22.00
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	0.6	--	--	0.7	--	3.7	--	--	--	--	0.7	--	0.5	--	--	27.00
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	0.6	--	--	0.6	--	0.7	--	--	--	--	0.4	--	0.4	--	--	1.51
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	1.4	--	--	1.0	--	1.0	--	--	--	--	0.4	--	0.4	--	--	1.20
Temperature (degrees Celcius)																		
OU2MW-57S	66 North Clinton	--	11.0	--	--	14.5	--	20.3	--	--	--	--	16.0	--	10.3	--	11.2	--
OU2MW-57I	66 North Clinton	--	11.7	--	--	15.6	--	16.4	--	--	--	--	15.8	--	11.4	--	13.1	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2013												Jan-14	Feb-14	Mar-14	Apr-14	May-14
		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13					
pH (SU)																		
OU2MW-57I2	66 North Clinton	--	13.2	--	--	14.7	--	16.8	--	--	--	--	14.7	--	11.9	--	13.5	--
OZMW-16S	OU-1 Union Boulevard	--	10.7	--	--	15.8	--	18.9	--	--	--	--	13.9	--	11.2	--	--	11.9
OZMW-16I	OU-1 Union Boulevard	--	12.4	--	--	16.4	--	16.9	--	--	--	--	13.7	--	12.8	--	--	13.1
OZMW-16I2	OU-1 Union Boulevard	--	12.4	--	--	16.8	--	16.0	--	--	--	--	13.1	--	12.9	--	--	13.9
OZMW-16D	OU-1 Union Boulevard	--	11.1	--	--	15.4	--	17.9	--	--	--	--	12.6	--	12.8	--	--	13.9
OZMW-17S	OU-1 Union Boulevard	11.6	10.2	12.1	--	15.6	--	18.1	19.0	18.2	17.1	16.5	13.5	10.6	9.8	9.3	12.1	13.7
OZMW-17I	OU-1 Union Boulevard	13.0	12.7	13.4	--	16.1	--	17.4	16.5	16.0	15.5	15.4	14.3	12.6	12.0	11.8	13.2	13.8
OZMW-17I2	OU-1 Union Boulevard	12.1	13.1	13.4	--	15.3	--	17.7	16.2	16.2	15.3	13.9	13.4	12.2	12.5	11.9	13.6	14.1
OZMW-17D	OU-1 Union Boulevard	11.5	13.0	13.2	--	14.9	--	18.8	14.8	14.6	15.0	13.6	12.4	12.3	12.3	11.9	13.6	16.9
OZMW-18S	OU-1 Union Boulevard	--	11.2	--	--	14.8	--	18.6	--	--	--	--	16.3	--	9.2	--	--	--
OZMW-18I	OU-1 Union Boulevard	--	12.7	--	--	15.7	--	17.5	--	--	--	--	15.4	--	--	11.6	--	--
OZMW-18I2	OU-1 Union Boulevard	--	12.7	--	--	16.2	--	16.8	--	--	--	--	14.5	14.3	12.9	11.8	11.0	13.3
OZMW-18D	OU-1 Union Boulevard	--	12.2	--	--	15.8	--	18.3	--	--	--	--	14.1	13.8	12.8	12.4	11.0	13.2
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	10.1	--	--	13.2	--	19.6	--	--	--	--	15.3	--	6.0	--	--	12.11
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	12.0	--	--	14.8	--	17.5	--	--	--	--	14.2	--	12.7	--	--	13.6
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	12.4	--	--	14.7	--	17.5	--	--	--	--	13.7	--	12.0	--	--	13.7
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	9.3	--	--	14.2	--	18.4	--	--	--	--	14.2	--	12.2	--	--	13.6
Oxidation Reduction Potential (mV)																		
OU2MW-57S	66 North Clinton	--	1	--	--	9	--	-52	--	--	--	--	-61	--	88	--	-46	--
OU2MW-57I	66 North Clinton	--	117	--	--	172	--	120	--	--	--	--	80	--	110	--	165	--
OU2MW-57I2	66 North Clinton	--	190	--	--	200	--	102	--	--	--	--	89	--	119	--	211	--
OZMW-16S	OU-1 Union Boulevard	--	244	--	--	179	--	48	--	--	--	--	186	--	166	--	--	212
OZMW-16I	OU-1 Union Boulevard	--	248	--	--	166	--	100	--	--	--	--	187	--	171	--	--	190
OZMW-16I2	OU-1 Union Boulevard	--	77	--	--	34	--	-65	--	--	--	--	141	--	182	--	--	188
OZMW-16D	OU-1 Union Boulevard	--	153	--	--	119	--	83	--	--	--	--	92	--	106	--	--	102
OZMW-17S	OU-1 Union Boulevard	142	205	160	--	154	--	18	107	-6	102	120	148	161	77	271	146	195
OZMW-17I	OU-1 Union Boulevard	142	242	107	--	151	--	68	101	90	64	156	142	165	132	242	132	213
OZMW-17I2	OU-1 Union Boulevard	194	192	135	--	170	--	157	148	143	92	211	120	211	159	265	106	202
OZMW-17D	OU-1 Union Boulevard	49	30	63	--	-19	--	24	15	4	83	16	23	10	-1	43	-7	-12
OZMW-18S	OU-1 Union Boulevard	--	188	--	--	158	--	122	--	--	--	--	128	--	--	169	--	--
OZMW-18I	OU-1 Union Boulevard	--	207	--	--	154	--	91	--	--	--	--	124	--	--	139	--	--
OZMW-18I2	OU-1 Union Boulevard	--	84	--	--	80	--	-8	--	--	--	--	87	159	161	245	170	246
OZMW-18D	OU-1 Union Boulevard	--	-28	--	--	-122	--	-62	--	--	--	--	-74	-11	107	98	121	79
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	189	--	--	210	--	117	--	--	--	--	174	--	234	--	--	233
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	194	--	--	95	--	124	--	--	--	--	75	--	157	--	--	209
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	258	--	--	222	--	156	--	--	--	--	135	--	174	--	--	212
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	15	--	--	-17	--	-8	--	--	--	--	24	--	23	--	--	8

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 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2014							2015						
		Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15
pH (SU)															
OU2MW-57S	66 North Clinton	--	--	5.66	--	5.42	--	--	5.75	--	--	5.72	--	--	5.8
OU2MW-57I	66 North Clinton	--	--	5.42	--	5.25	--	--	5.66	--	--	5.48	--	--	5.5
OU2MW-57I2	66 North Clinton	--	--	5.87	--	5.18	--	--	5.65	--	--	5.52	--	--	5.4
OZMW-16S	OU-1 Union Boulevard	--	--	6.33	--	5.98	--	--	6.56	--	--	6.68	--	--	6.3
OZMW-16I	OU-1 Union Boulevard	--	--	6.43	--	6.11	--	--	6.54	--	--	6.68	--	--	6.3
OZMW-16I2	OU-1 Union Boulevard	--	--	5.95	--	5.09	--	--	5.73	--	--	5.74	--	--	5.9
OZMW-16D	OU-1 Union Boulevard	--	--	4.05	--	4.27	--	--	4.21	--	--	4.77	--	--	4.5
OZMW-17S	OU-1 Union Boulevard	6.45	--	6.66	6.24	6.03	6.68	6.62	6.22	6.24	6.19	6.28	6.15	6.29	6.04
OZMW-17I	OU-1 Union Boulevard	6.49	--	6.98	6.60	5.99	7.14	7.01	6.70	6.49	6.73	6.55	6.62	6.67	6.53
OZMW-17I2	OU-1 Union Boulevard	5.85	--	6.32	5.84	5.60	6.45	6.33	6.01	5.50	5.40	5.47	5.53	5.54	5.33
OZMW-17D	OU-1 Union Boulevard	5.18	--	5.42	5.12	4.53	5.66	5.41	5.29	5.03	5.22	5.11	5.07	5.14	5.18
OZMW-18S	OU-1 Union Boulevard	6.88	--	6.45	--	6.54	--	--	6.71	--	--	6.62	--	--	6.6
OZMW-18I	OU-1 Union Boulevard	6.89	--	7.04	--	6.12	--	--	7.09	--	--	6.96	--	--	6.9
OZMW-18I2	OU-1 Union Boulevard	6.03	--	6.37	6.10	6.09	6.05	5.68	6.16	6.01	5.47	6.25	6.17	6.39	6.05
OZMW-18D	OU-1 Union Boulevard	5.18	--	5.25	5.22	4.74	5.28	4.40	4.81	4.72	4.52	5.22	4.95	5.27	5.03
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	5.85	--	5.49	--	--	5.03	--	--	5.10	--	--	5.0
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	5.43	--	5.51	--	--	6.02	--	--	5.70	--	--	5.5
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	4.95	--	4.79	--	--	4.83	--	--	4.83	--	--	4.8
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	5.28	--	4.83	--	--	5.45	--	--	5.12	--	--	5.0
Conductivity (mS/cm)															
OU2MW-57S	66 North Clinton	--	--	0.472	--	0.556	--	--	0.366	--	--	0.501	--	--	0.4
OU2MW-57I	66 North Clinton	--	--	0.335	--	0.966	--	--	0.340	--	--	0.525	--	--	0.4
OU2MW-57I2	66 North Clinton	--	--	0.491	--	1.320	--	--	0.462	--	--	0.382	--	--	0.4
OZMW-16S	OU-1 Union Boulevard	--	--	0.441	--	0.421	--	--	0.441	--	--	0.453	--	--	0.4
OZMW-16I	OU-1 Union Boulevard	--	--	0.689	--	0.688	--	--	0.757	--	--	0.705	--	--	0.7
OZMW-16I2	OU-1 Union Boulevard	--	--	0.563	--	0.630	--	--	0.469	--	--	0.343	--	--	0.5
OZMW-16D	OU-1 Union Boulevard	--	--	0.185	--	0.197	--	--	0.228	--	--	0.209	--	--	0.2
OZMW-17S	OU-1 Union Boulevard	0.560	--	0.482	0.396	0.425	0.389	0.370	0.460	0.530	2.280	0.448	0.550	0.491	0.545
OZMW-17I	OU-1 Union Boulevard	0.676	--	0.644	0.572	0.695	0.658	0.673	0.707	0.710	0.680	0.698	0.680	0.658	0.631
OZMW-17I2	OU-1 Union Boulevard	0.563	--	0.587	0.525	0.553	0.614	0.624	0.575	1.030	0.672	0.597	0.563	0.499	0.510
OZMW-17D	OU-1 Union Boulevard	0.238	--	0.229	0.324	0.394	0.352	0.380	0.454	0.709	0.453	0.446	0.348	0.276	0.277
OZMW-18S	OU-1 Union Boulevard	0.492	--	0.552	--	0.488	--	--	0.503	--	--	0.533	--	--	0.7
OZMW-18I	OU-1 Union Boulevard	0.611	--	0.568	--	0.718	--	--	0.666	--	--	0.615	--	--	0.6
OZMW-18I2	OU-1 Union Boulevard	0.575	--	0.602	0.595	0.620	0.608	0.679	0.632	0.613	0.634	0.551	0.614	0.596	0.541
OZMW-18D	OU-1 Union Boulevard	0.612	--	0.557	0.561	0.717	0.558	0.622	0.613	0.823	0.653	0.552	0.535	0.495	0.488
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	0.244	--	0.251	--	--	0.292	--	--	0.200	--	--	0.2
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	0.116	--	0.291	--	--	0.430	--	--	0.518	--	--	0.3
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	0.404	--	0.472	--	--	0.474	--	--	0.480	--	--	0.4
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	0.236	--	0.233	--	--	0.196	--	--	0.17	--	--	0.2
Dissolved Oxygen (mg/L)															
OU2MW-57S	66 North Clinton	--	--	1.90	--	1.09	--	--	5.15	--	--	9.74	--	--	4.9
OU2MW-57I	66 North Clinton	--	--	0.70	--	0.74	--	--	0.48	--	--	0.47	--	--	2.4
OU2MW-57I2	66 North Clinton	--	--	0.60	--	0.45	--	--	1.21	--	--	0.47	--	--	1.1
OZMW-16S	OU-1 Union Boulevard	--	--	32.63	--	29.36	--	--	45.6	--	--	39.61	--	--	21.7
OZMW-16I	OU-1 Union Boulevard	--	--	37.90	--	34.00	--	--	50.0	--	--	50.0	--	--	27.6
OZMW-16I2	OU-1 Union Boulevard	--	--	25.20	--	27.67	--	--	41.3	--	--	39.00	--	--	24.9
OZMW-16D	OU-1 Union Boulevard	--	--	1.60	--	1.10	--	--	1.0	--	--	0.48	--	--	1.6
OZMW-17S	OU-1 Union Boulevard	22.0	--	25.0	17.0	17.6	19.0	19.0	17.0	14.8	22.7	26.0	20.0	16.0	17.1
OZMW-17I	OU-1 Union Boulevard	27.0	--	30.0	30.0	25.7	21.0	23.0	39.3	14.2	34.8	26.0	26.0	24.0	21.8
OZMW-17I2	OU-1 Union Boulevard	7.0	--	12.0	13.0	10.4	9.0	12.0	11.3	8.5	11.3	6.0	6.0	6.0	6.4
OZMW-17D	OU-1 Union Boulevard	1.0	--	0.0	0.2	1.0	0.2	0.2	0.36	0.54	0.67	1.80	0.40	0.40	3.66
OZMW-18S	OU-1 Union Boulevard	18.0	--	26.2	--	27.60	--	--	25.35	--	--	29.04	--	--	21.2
OZMW-18I	OU-1 Union Boulevard	11.9	--	14.2	--	14.74	--	--	14.05	--	--	15.48	--	--	9.4
OZMW-18I2	OU-1 Union Boulevard	24.0	--	32.0	26.0	27.1	35.0	26.0	31.03	13.0	25.3	23.0	26.0	23.0	28.0
OZMW-18D	OU-1 Union Boulevard	22.0	--	30.0	25.0	23.6	26.0	25.0	19.64	0.42	13.1	26.0	26.0	27.0	27.0
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	34.50	--	40.45	--	--	41.5	--	--	34.9	--	--	23.5
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	29.97	--	40.40	--	--	50.0	--	--	44.8	--	--	44.7
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	18.04	--	50.00	--	--	47.9	--	--	12.0	--	--	9.0
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	0.47	--	1.10	--	--	0.95	--	--	0.4	--	--	1.3
Temperature (degrees Celcius)															
OU2MW-57S	66 North Clinton	--	--	19.91	--	20.14	--	--	11.37	--	--	10.69	--	--	16.9
OU2MW-57I	66 North Clinton	--	--	16.18	--	16.15	--	--	12.92	--	--	12.39	--	--	13.7

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Well ID	Oxygen Injection System	2014							2015						
		Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15
pH (SU)															
OU2MW-57I2	66 North Clinton	--	--	17.12	--	15.42	--	--	12.56	--	--	11.88	--	--	15.2
OZMW-16S	OU-1 Union Boulevard	--	--	17.25	--	17.13	--	--	10.75	--	--	11.16	--	--	15.5
OZMW-16I	OU-1 Union Boulevard	--	--	15.83	--	14.18	--	--	11.44	--	--	12.37	--	--	14.2
OZMW-16I2	OU-1 Union Boulevard	--	--	20.00	--	14.93	--	--	11.66	--	--	12.72	--	--	14.9
OZMW-16D	OU-1 Union Boulevard	--	--	19.80	--	14.06	--	--	9.99	--	--	12.80	--	--	15.0
OZMW-17S	OU-1 Union Boulevard	14.8	--	18.37	17.5	16.9	14.4	13.56	10.83	8.54	8.30	9.94	12.95	15.67	16.70
OZMW-17I	OU-1 Union Boulevard	13.7	--	16.4	14.8	14.5	13.6	12.87	10.78	11.07	10.84	11.57	12.69	14.20	15.05
OZMW-17I2	OU-1 Union Boulevard	14.0	--	16.5	14.1	13.3	13.0	12.52	11.12	10.70	10.54	12.01	13.47	14.34	15.02
OZMW-17D	OU-1 Union Boulevard	13.9	--	17.7	13.9	13.4	12.6	12.25	10.05	10.01	10.48	12.51	13.84	14.46	15.17
OZMW-18S	OU-1 Union Boulevard	14.0	--	17.34	--	17.06	--	--	10.40	--	--	11.07	--	--	16.1
OZMW-18I	OU-1 Union Boulevard	14.5	--	19.70	--	15.15	--	--	11.26	--	--	11.77	--	--	14.7
OZMW-18I2	OU-1 Union Boulevard	14.6	--	18.4	14.9	14.4	13.7	12.78	11.51	12.27	12.25	12.64	12.22	14.18	15.19
OZMW-18D	OU-1 Union Boulevard	15.5	--	17.9	14.1	14.0	12.6	12.39	10.82	11.37	11.51	12.82	14.32	14.40	15.77
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	16.90	--	16.33	--	--	7.42	--	--	12.63	--	--	16.5
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	14.60	--	13.25	--	--	9.80	--	--	14.23	--	--	14.3
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	18.79	--	13.38	--	--	8.50	--	--	13.04	--	--	14.8
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	13.64	--	13.78	--	--	9.30	--	--	13.33	--	--	16.3
Oxidation Reduction Potential (mV)															
OU2MW-57S	66 North Clinton	--	--	-16	--	-53	--	--	36	--	--	115	--	--	17.0
OU2MW-57I	66 North Clinton	--	--	159	--	126	--	--	54	--	--	90	--	--	191.0
OU2MW-57I2	66 North Clinton	--	--	139	--	158	--	--	68	--	--	107	--	--	150.0
OZMW-16S	OU-1 Union Boulevard	--	--	278	--	127	--	--	254	--	--	164	--	--	221.0
OZMW-16I	OU-1 Union Boulevard	--	--	271	--	164	--	--	251	--	--	185	--	--	229.0
OZMW-16I2	OU-1 Union Boulevard	--	--	125	--	149	--	--	255	--	--	242	--	--	236.0
OZMW-16D	OU-1 Union Boulevard	--	--	146	--	173	--	--	192	--	--	231	--	--	157.0
OZMW-17S	OU-1 Union Boulevard	180	--	86	177	196	220	182	222	154	119	255	247	363	215
OZMW-17I	OU-1 Union Boulevard	173	--	92	154	71	208	145	235	159	140	256	248	190	212
OZMW-17I2	OU-1 Union Boulevard	152	--	82	132	199	218	108	220	264	222	269	272	272	277
OZMW-17D	OU-1 Union Boulevard	66	--	-29	73	-2	65	50	58	87	91	69	80	43	48
OZMW-18S	OU-1 Union Boulevard	135	--	162	--	185	--	--	-31	--	--	148	--	--	196.0
OZMW-18I	OU-1 Union Boulevard	109	--	75	--	40	--	--	97	--	--	128	--	--	192.0
OZMW-18I2	OU-1 Union Boulevard	176	--	74	173	207	196	204	194	202	263	247	160	184	245
OZMW-18D	OU-1 Union Boulevard	142	--	44	119	53	176	183	192	162	173	182	200	119	116
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	207	--	173	--	--	207	--	--	268	--	--	341.0
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	242	--	203	--	--	219	--	--	250	--	--	385.0
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	271	--	215	--	--	247	--	--	268	--	--	340.0
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	97	--	109	--	--	66	--	--	127	--	--	81.0

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2015					2016											
		Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
pH (SU)																		
OU2MW-57S	66 North Clinton	--	--	4.8	--	--	5.56	--	--	--	6.29	--	5.81	--	--	--	6.01	--
OU2MW-57I	66 North Clinton	--	--	5.0	--	--	5.39	--	--	--	6.23	--	5.79	--	--	--	5.96	--
OU2MW-57I2	66 North Clinton	--	--	5.0	--	--	5.39	--	--	--	6.04	--	5.58	--	--	--	5.88	--
OZMW-16S	OU-1 Union Boulevard	--	--	6.1	--	--	4.85	--	--	--	6.37	--	6.94	--	--	6.79	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	5.4	--	--	5.24	--	--	--	6.10	--	6.74	--	--	6.57	--	--
OZMW-16I2	OU-1 Union Boulevard	--	--	5.9	--	--	4.23	--	--	--	4.83	--	5.86	--	--	6.32	--	--
OZMW-16D	OU-1 Union Boulevard	--	--	4.3	--	--	3.27	--	--	--	4.04	--	4.97	--	--	4.81	--	--
OZMW-17S	OU-1 Union Boulevard	6.10	4.88	5.78	4.95	5.19	5.74	4.13	6.28	3.58	4.29	6.70	6.76	6.57	--	--	6.73	--
OZMW-17I	OU-1 Union Boulevard	6.61	5.25	5.25	5.40	5.85	6.23	5.17	6.66	4.27	4.63	6.94	7.10	6.94	--	--	6.97	--
OZMW-17I2	OU-1 Union Boulevard	5.59	4.80	4.89	5.06	5.18	5.68	4.38	5.55	3.07	3.07	5.71	6.07	6.17	--	--	6.26	--
OZMW-17D	OU-1 Union Boulevard	5.01	4.30	3.94	4.11	4.40	4.65	2.65	4.34	2.02	2.16	4.70	4.85	4.32	--	--	4.84	--
OZMW-18S	OU-1 Union Boulevard	--	--	6.1	--	--	6.76	--	--	--	6.55	--	7.19	--	--	--	7.18	--
OZMW-18I	OU-1 Union Boulevard	--	--	5.5	--	--	7.00	--	--	--	6.77	--	7.35	--	--	--	7.42	--
OZMW-18I2	OU-1 Union Boulevard	5.98	4.73	5.49	4.81	4.83	5.55	4.42	6.00	3.58	3.79	6.38	6.62	6.21	--	--	6.17	--
OZMW-18D	OU-1 Union Boulevard	5.18	4.35	4.56	4.32	4.44	5.05	3.23	5.13	2.72	2.74	5.43	5.50	5.21	--	--	5.32	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	4.2	--	--	3.40	--	--	--	4.89	--	4.81	--	--	--	4.60	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	4.9	--	--	4.44	--	--	--	6.05	--	5.80	--	--	--	5.89	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	4.2	--	--	3.68	--	--	--	5.44	--	5.20	--	--	--	5.14	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	4.2	--	--	3.99	--	--	--	5.79	--	5.49	--	--	--	5.37	--
Conductivity (mS/cm)																		
OU2MW-57S	66 North Clinton	--	--	0.5	--	--	0.333	--	--	--	0.393	--	0.672	--	--	--	0.508	--
OU2MW-57I	66 North Clinton	--	--	0.7	--	--	0.381	--	--	--	0.399	--	0.559	--	--	--	0.335	--
OU2MW-57I2	66 North Clinton	--	--	0.9	--	--	0.375	--	--	--	0.438	--	0.748	--	--	--	0.476	--
OZMW-16S	OU-1 Union Boulevard	--	--	0.3	--	--	0.508	--	--	--	0.543	--	6.410	--	--	0.269	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	0.5	--	--	0.491	--	--	--	0.703	--	0.775	--	--	0.665	--	--
OZMW-16I2	OU-1 Union Boulevard	--	--	0.5	--	--	0.302	--	--	--	0.359	--	0.481	--	--	0.688	--	--
OZMW-16D	OU-1 Union Boulevard	--	--	0.2	--	--	0.164	--	--	--	0.200	--	0.229	--	--	0.216	--	--
OZMW-17S	OU-1 Union Boulevard	0.483	0.474	0.437	0.400	0.522	0.487	0.664	0.443	0.377	0.398	0.509	0.588	0.599	--	--	0.380	--
OZMW-17I	OU-1 Union Boulevard	0.529	0.589	0.533	0.585	0.666	0.675	0.494	0.653	0.504	0.543	0.659	0.715	0.692	--	--	0.721	--
OZMW-17I2	OU-1 Union Boulevard	0.443	0.507	0.439	0.432	0.464	0.493	0.354	0.427	0.326	0.336	0.457	0.523	0.606	--	--	0.630	--
OZMW-17D	OU-1 Union Boulevard	0.254	0.288	0.234	0.295	0.324	0.344	0.271	0.400	0.294	0.251	0.262	0.288	0.317	--	--	0.366	--
OZMW-18S	OU-1 Union Boulevard	--	--	0.4	--	--	0.489	--	--	--	0.523	--	0.331	--	--	--	0.597	--
OZMW-18I	OU-1 Union Boulevard	--	--	0.5	--	--	0.624	--	--	--	0.698	--	0.499	--	--	--	0.634	--
OZMW-18I2	OU-1 Union Boulevard	0.501	0.576	0.463	0.514	0.535	0.585	0.412	0.539	0.415	0.434	0.601	0.673	1.01	--	--	0.719	--
OZMW-18D	OU-1 Union Boulevard	0.404	0.472	0.421	0.419	0.452	0.517	0.391	0.366	0.334	0.326	0.443	0.448	0.492	--	--	0.528	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	0.1	--	--	0.163	--	--	--	0.240	--	0.102	--	--	--	0.117	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	0.5	--	--	0.307	--	--	--	0.512	--	0.329	--	--	--	0.519	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	0.4	--	--	0.319	--	--	--	0.482	--	0.277	--	--	--	0.408	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	0.2	--	--	0.115	--	--	--	0.171	--	0.117	--	--	--	0.188	--
Dissolved Oxygen (mg/L)																		
OU2MW-57S	66 North Clinton	--	--	7.6	--	--	7.81	--	--	--	6.1	--	5.83	--	--	--	4.85	--
OU2MW-57I	66 North Clinton	--	--	0.4	--	--	1.11	--	--	--	2.7	--	3.75	--	--	--	0.70	--
OU2MW-57I2	66 North Clinton	--	--	0.5	--	--	0.95	--	--	--	2.7	--	4.16	--	--	--	0.54	--
OZMW-16S	OU-1 Union Boulevard	--	--	33.0	--	--	30.14	--	--	--	35.0	--	25.75	--	--	29.60	--	--
OZMW-16I	OU-1 Union Boulevard	--	--	40.4	--	--	34.34	--	--	--	40.0	--	27.56	--	--	33.60	--	--
OZMW-16I2	OU-1 Union Boulevard	--	--	39.3	--	--	25.93	--	--	--	40.0	--	24.29	--	--	35.00	--	--
OZMW-16D	OU-1 Union Boulevard	--	--	15.2	--	--	0.18	--	--	--	0.52	--	3.18	--	--	2.70	--	--
OZMW-17S	OU-1 Union Boulevard	19.9	14.1	17.1	17.0	27.2	17.00	16.00	21.00	25.00	23.00	19.00	21.00	15.00	--	--	17.22	--
OZMW-17I	OU-1 Union Boulevard	24.3	20.1	37.3	18.0	40.9	16.00	17.00	25.00	23.00	24.00	21.00	22.00	34.00	--	--	18.89	--
OZMW-17I2	OU-1 Union Boulevard	14.1	15.1	21.0	19.0	46.5	15.00	16.00	20.00	23.00	20.00	24.00	22.00	33.00	--	--	20.43	--
OZMW-17D	OU-1 Union Boulevard	1.20	5.45	26.00	19.00	43.32	21.00	21.00	24.00	25.00	23.00	24.00	24.00	33.00	--	--	20.04	--
OZMW-18S	OU-1 Union Boulevard	--	--	27.0	--	--	38.10	--	--	--	32.0	--	25.08	--	--	--	30.95	--
OZMW-18I	OU-1 Union Boulevard	--	--	27.4	--	--	18.50	--	--	--	14.9	--	14.80	--	--	--	18.32	--
OZMW-18I2	OU-1 Union Boulevard	23.6	16.2	27.0	17.0	34.0	15.00	15.00	28.00	21.00	23.00	22.00	22.00	21.00	--	--	14.75	--
OZMW-18D	OU-1 Union Boulevard	21.0	18.0	25.0	19.0	32.0	17.00	18.00	23.00	19.00	23.00	17.00	17.00	18.00	--	--	15.12	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	40.3	--	--	33.88	--	--	--	18.0	--	23.69	--	--	--	23.20	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	48.0	--	--	41.50	--	--	--	20.0	--	25.10	--	--	--	28.80	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	47.8	--	--	36.03	--	--	--	6.9	--	17.11	--	--	--	18.00	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	1.2	--	--	3.34	--	--	--	2.2	--	3.34	--	--	--	2.10	--
Temperature (degrees Celcius)																		
OU2MW-57S	66 North Clinton	--	--	20.6	--	--	14.62	--	--	--	13.70	--	19.71	--	--	--	16.16	--
OU2MW-57I	66 North Clinton	--	--	15.0	--	--	15.17	--	--	--	13.59	--	16.86	--	--	--	14.92	--

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Well ID	Oxygen Injection System	2015					2016											
		Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
pH (SU)																		
OU2MW-57I2	66 North Clinton	--	--	14.9	--	--	14.22	--	--	--	14.10	--	17.02	--	--	--	14.02	--
OZMW-16S	OU-1 Union Boulevard	--	--	15.8	--	--	12.68	--	--	--	11.39	--	15.81	--	--	--	17.80	--
OZMW-16I	OU-1 Union Boulevard	--	--	14.7	--	--	14.28	--	--	--	11.68	--	15.75	--	--	--	15.58	--
OZMW-16I2	OU-1 Union Boulevard	--	--	13.2	--	--	13.91	--	--	--	11.75	--	15.67	--	--	--	16.11	--
OZMW-16D	OU-1 Union Boulevard	--	--	14.6	--	--	14.07	--	--	--	11.45	--	15.72	--	--	--	14.79	--
OZMW-17S	OU-1 Union Boulevard	17.52	18.57	17.08	15.07	14.48	13.17	12.42	11.20	13.65	16.39	21.51	16.97	19.95	--	--	16.71	--
OZMW-17I	OU-1 Union Boulevard	16.47	15.54	15.31	14.76	14.25	13.52	14.69	12.80	14.95	16.27	20.82	15.85	16.92	--	--	15.55	--
OZMW-17I2	OU-1 Union Boulevard	16.58	15.61	14.95	14.00	13.45	12.65	13.97	12.70	15.23	16.35	19.56	15.27	18.32	--	--	14.04	--
OZMW-17D	OU-1 Union Boulevard	16.05	15.05	13.48	13.68	13.14	12.18	13.91	12.30	15.09	16.62	18.34	14.88	20.02	--	--	13.69	--
OZMW-18S	OU-1 Union Boulevard	--	--	17.2	--	--	11.40	--	--	--	11.28	--	17.81	--	--	--	15.27	--
OZMW-18I	OU-1 Union Boulevard	--	--	15.9	--	--	12.30	--	--	--	11.79	--	15.75	--	--	--	14.45	--
OZMW-18I2	OU-1 Union Boulevard	15.49	15.28	14.72	14.30	14.32	13.55	14.73	12.70	15.26	15.98	17.65	15.60	17.54	--	--	14.60	--
OZMW-18D	OU-1 Union Boulevard	18.15	14.98	15.15	13.89	13.68	12.71	14.55	9.70	15.34	15.97	16.14	15.54	17.27	--	--	14.34	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	15.7	--	--	13.26	--	--	--	13.67	--	20.21	--	--	--	16.18	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	12.6	--	--	14.68	--	--	--	15.09	--	18.64	--	--	--	13.27	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	14.6	--	--	13.61	--	--	--	14.52	--	17.97	--	--	--	13.59	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	14.2	--	--	13.55	--	--	--	14.8	--	17.68	--	--	--	13.82	--
Oxidation Reduction Potential (mV)																		
OU2MW-57S	66 North Clinton	--	--	27.0	--	--	69	--	--	--	-38	--	-45.00	--	--	--	-71	--
OU2MW-57I	66 North Clinton	--	--	170.0	--	--	91	--	--	--	108	--	145.00	--	--	--	101	--
OU2MW-57I2	66 North Clinton	--	--	168.0	--	--	81	--	--	--	227	--	185.00	--	--	--	125	--
OZMW-16S	OU-1 Union Boulevard	--	--	118.0	--	--	286	--	--	--	154	--	136.00	--	--	--	185	--
OZMW-16I	OU-1 Union Boulevard	--	--	89.0	--	--	294	--	--	--	156	--	201.00	--	--	--	237	--
OZMW-16I2	OU-1 Union Boulevard	--	--	145.0	--	--	328	--	--	--	200	--	222.00	--	--	--	239	--
OZMW-16D	OU-1 Union Boulevard	--	--	139.0	--	--	239	--	--	--	143	--	144.00	--	--	--	113	--
OZMW-17S	OU-1 Union Boulevard	255	213	77	275	233	184	276	146	295	172	141	212.00	154.00	--	--	112	--
OZMW-17I	OU-1 Union Boulevard	230	211	204	258	227	185	271	120	255	195	149	240.00	202.00	--	--	134	--
OZMW-17I2	OU-1 Union Boulevard	278	253	224	282	264	215	317	160	338	290	210	266.00	227.00	--	--	174	--
OZMW-17D	OU-1 Union Boulevard	56	109	166	260	286	217	247	168	226	204	187	179.00	242.00	--	--	149	--
OZMW-18S	OU-1 Union Boulevard	--	--	126.0	--	--	176	--	--	--	147	--	185.00	--	--	--	103	--
OZMW-18I	OU-1 Union Boulevard	--	--	195.0	--	--	170	--	--	--	126	--	145.00	--	--	--	97	--
OZMW-18I2	OU-1 Union Boulevard	187	165	168	239	182	175	283	125	261	225	156	165.00	229.00	--	--	120	--
OZMW-18D	OU-1 Union Boulevard	105	108	104	185	175	135	169	176	132	115	64	68.00	68.00	--	--	78	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	--	--	280.0	--	--	443	--	--	--	397	--	340.00	--	--	--	305	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	--	--	184.0	--	--	252	--	--	--	311	--	279.00	--	--	--	225	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	--	--	218.0	--	--	397	--	--	--	300	--	267.00	--	--	--	230	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	--	--	133.0	--	--	119	--	--	--	44	--	12.00	--	--	--	11	--

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Well ID	Oxygen Injection System	2017											
		Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
pH (SU)													
OU2MW-57S	66 North Clinton	5.61	--	--	5.99	--	--	6.07	--	--	5.89	--	--
OU2MW-57I	66 North Clinton	5.41	--	--	5.39	--	--	5.88	--	--	5.77	--	--
OU2MW-57I2	66 North Clinton	5.50	--	--	5.71	--	--	5.73	--	--	5.67	--	--
OZMW-16S	OU-1 Union Boulevard	6.87	--	--	6.97	--	--	6.86	--	--	7.73	--	--
OZMW-16I	OU-1 Union Boulevard	6.84	--	--	6.74	--	--	6.85	--	--	7.56	--	--
OZMW-16I2	OU-1 Union Boulevard	6.09	--	--	6.15	--	--	5.88	--	--	6.09	--	--
OZMW-16D	OU-1 Union Boulevard	4.95	--	--	5.06	--	--	5.02	--	--	4.88	--	--
OZMW-17S	OU-1 Union Boulevard	--	7.16	--	7.01	--	--	--	6.67	--	6.55	--	--
OZMW-17I	OU-1 Union Boulevard	--	7.37	--	7.20	--	--	--	6.84	--	6.83	--	--
OZMW-17I2	OU-1 Union Boulevard	--	6.57	--	6.41	--	--	--	6.33	--	6.06	--	--
OZMW-17D	OU-1 Union Boulevard	--	5.02	--	4.99	--	--	--	4.59	--	4.48	--	--
OZMW-18S	OU-1 Union Boulevard	--	7.31	--	7.27	--	--	--	6.97	--	7.02	--	--
OZMW-18I	OU-1 Union Boulevard	--	7.57	--	7.56	--	--	--	7.16	--	7.04	--	--
OZMW-18I2	OU-1 Union Boulevard	6.29	--	--	6.45	--	--	--	5.93	--	6.15	--	--
OZMW-18D	OU-1 Union Boulevard	5.67	--	--	5.79	--	--	--	5.43	--	5.42	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	4.75	--	--	6.24	--	--	5.37	--	--	5.61	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	5.82	--	--	5.89	--	--	5.70	--	--	6.53	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	5.15	--	--	5.20	--	--	5.09	--	--	5.93	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	5.31	--	--	5.52	--	--	5.52	--	--	6.07	--	--
Conductivity (mS/cm)													
OU2MW-57S	66 North Clinton	0.401	--	--	0.442	--	--	0.242	--	--	0.461	--	--
OU2MW-57I	66 North Clinton	0.331	--	--	0.394	--	--	0.385	--	--	0.523	--	--
OU2MW-57I2	66 North Clinton	0.412	--	--	0.521	--	--	0.221	--	--	0.367	--	--
OZMW-16S	OU-1 Union Boulevard	0.355	--	--	0.583	--	--	0.599	--	--	0.357	--	--
OZMW-16I	OU-1 Union Boulevard	0.713	--	--	0.952	--	--	0.480	--	--	0.718	--	--
OZMW-16I2	OU-1 Union Boulevard	0.606	--	--	0.678	--	--	0.645	--	--	0.712	--	--
OZMW-16D	OU-1 Union Boulevard	0.251	--	--	0.326	--	--	0.141	--	--	0.227	--	--
OZMW-17S	OU-1 Union Boulevard	--	0.546	--	0.379	--	--	--	0.619	--	0.429	--	--
OZMW-17I	OU-1 Union Boulevard	--	0.648	--	0.479	--	--	--	0.769	--	0.664	--	--
OZMW-17I2	OU-1 Union Boulevard	--	0.540	--	0.347	--	--	--	0.615	--	0.550	--	--
OZMW-17D	OU-1 Union Boulevard	--	0.414	--	0.304	--	--	--	0.465	--	0.355	--	--
OZMW-18S	OU-1 Union Boulevard	--	0.603	--	0.434	--	--	--	0.559	--	0.640	--	--
OZMW-18I	OU-1 Union Boulevard	--	0.608	--	0.468	--	--	--	0.735	--	0.680	--	--
OZMW-18I2	OU-1 Union Boulevard	0.515	--	--	0.395	--	--	--	1.530	--	0.619	--	--
OZMW-18D	OU-1 Union Boulevard	0.504	--	--	0.333	--	--	--	0.613	--	0.625	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	0.147	--	--	0.399	--	--	0.115	--	--	0.126	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	0.438	--	--	0.751	--	--	0.537	--	--	0.538	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	0.409	--	--	0.673	--	--	0.409	--	--	0.431	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	0.188	--	--	0.236	--	--	0.109	--	--	0.167	--	--
Dissolved Oxygen (mg/L)													
OU2MW-57S	66 North Clinton	3.00	--	--	2.37	--	--	0.90	--	--	4.82	--	--
OU2MW-57I	66 North Clinton	0.68	--	--	3.00	--	--	0.64	--	--	3.34	--	--
OU2MW-57I2	66 North Clinton	0.80	--	--	0.67	--	--	1.06	--	--	1.09	--	--
OZMW-16S	OU-1 Union Boulevard	36.80	--	--	20.31	--	--	29.49	--	--	31.81	--	--
OZMW-16I	OU-1 Union Boulevard	41.50	--	--	28.69	--	--	34.96	--	--	37.55	--	--
OZMW-16I2	OU-1 Union Boulevard	26.40	--	--	33.42	--	--	26.97	--	--	30.31	--	--
OZMW-16D	OU-1 Union Boulevard	2.00	--	--	0.36	--	--	0.38	--	--	0.87	--	--
OZMW-17S	OU-1 Union Boulevard	--	20.00	--	10.00	--	--	--	19.00	--	20	--	--
OZMW-17I	OU-1 Union Boulevard	--	24.00	--	23.00	--	--	--	22.00	--	28	--	--
OZMW-17I2	OU-1 Union Boulevard	--	26.00	--	22.00	--	--	--	23.00	--	28	--	--
OZMW-17D	OU-1 Union Boulevard	--	20.00	--	35.28	--	--	--	24.00	--	27	--	--
OZMW-18S	OU-1 Union Boulevard	--	17.00	--	23.21	--	--	--	25.67	--	27	--	--
OZMW-18I	OU-1 Union Boulevard	--	16.00	--	13.99	--	--	--	10.39	--	19	--	--
OZMW-18I2	OU-1 Union Boulevard	5.00	--	--	21.00	--	--	--	50.00	--	31	--	--
OZMW-18D	OU-1 Union Boulevard	21.00	--	--	14.00	--	--	--	19.01	--	19	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	23.00	--	--	39.00	--	--	31.33	--	--	33.73	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	21.20	--	--	41.72	--	--	33.46	--	--	33.12	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	18.10	--	--	0.68	--	--	1.52	--	--	3.69	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	1.90	--	--	0.37	--	--	0.44	--	--	0.64	--	--
Temperature (degrees Celcius)													
OU2MW-57S	66 North Clinton	11.65	--	--	12.61	--	--	19.68	--	--	20.40	--	--
OU2MW-57I	66 North Clinton	13.74	--	--	13.43	--	--	16.44	--	--	17.29	--	--

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2017											
		Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
pH (SU)													
OU2MW-57I2	66 North Clinton	13.44	--	--	14.86	--	--	16.44	--	--	17.10	--	--
OZMW-16S	OU-1 Union Boulevard	11.20	--	--	15.94	--	--	16.78	--	--	17.74	--	--
OZMW-16I	OU-1 Union Boulevard	12.01	--	--	16.81	--	--	17.06	--	--	16.00	--	--
OZMW-16I2	OU-1 Union Boulevard	11.19	--	--	14.66	--	--	17.91	--	--	15.12	--	--
OZMW-16D	OU-1 Union Boulevard	10.96	--	--	17.35	--	--	18.12	--	--	13.91	--	--
OZMW-17S	OU-1 Union Boulevard	--	11.72	--	12.00	--	--	--	19.42	--	16.97	--	--
OZMW-17I	OU-1 Union Boulevard	--	13.46	--	12.87	--	--	--	16.62	--	15.18	--	--
OZMW-17I2	OU-1 Union Boulevard	--	12.44	--	13.11	--	--	--	17.01	--	14.18	--	--
OZMW-17D	OU-1 Union Boulevard	--	12.15	--	13.08	--	--	--	16.92	--	13.91	--	--
OZMW-18S	OU-1 Union Boulevard	--	13.13	--	13.54	--	--	--	18.14	--	17.23	--	--
OZMW-18I	OU-1 Union Boulevard	--	13.52	--	14.54	--	--	--	17.69	--	15.86	--	--
OZMW-18I2	OU-1 Union Boulevard	14.02	--	--	14.59	--	--	--	15.55	--	15.25	--	--
OZMW-18D	OU-1 Union Boulevard	13.92	--	--	14.88	--	--	--	14.19	--	14.56	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	11.41	--	--	12.85	--	--	19.80	--	--	19.06	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	12.32	--	--	15.24	--	--	17.02	--	--	17.03	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	11.44	--	--	15.24	--	--	17.52	--	--	16.22	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	11.28	--	--	14.34	--	--	18.51	--	--	15.86	--	--
Oxidation Reduction Potential (mV)													
OU2MW-57S	66 North Clinton	-13	--	--	2	--	--	-41	--	--	-33	--	--
OU2MW-57I	66 North Clinton	136	--	--	217	--	--	185	--	--	184	--	--
OU2MW-57I2	66 North Clinton	224	--	--	152	--	--	222	--	--	222	--	--
OZMW-16S	OU-1 Union Boulevard	172	--	--	147	--	--	207	--	--	114	--	--
OZMW-16I	OU-1 Union Boulevard	153	--	--	252	--	--	155	--	--	189	--	--
OZMW-16I2	OU-1 Union Boulevard	160	--	--	141	--	--	233	--	--	191	--	--
OZMW-16D	OU-1 Union Boulevard	115	--	--	133	--	--	131	--	--	93	--	--
OZMW-17S	OU-1 Union Boulevard	--	185	--	157	--	--	--	149	--	177	--	--
OZMW-17I	OU-1 Union Boulevard	--	203	--	166	--	--	--	165	--	150	--	--
OZMW-17I2	OU-1 Union Boulevard	--	243	--	225	--	--	--	197	--	189	--	--
OZMW-17D	OU-1 Union Boulevard	--	129	--	219	--	--	--	183	--	199	--	--
OZMW-18S	OU-1 Union Boulevard	--	94	--	258	--	--	--	148	--	118	--	--
OZMW-18I	OU-1 Union Boulevard	--	88	--	230	--	--	--	143	--	168	--	--
OZMW-18I2	OU-1 Union Boulevard	162	--	--	282	--	--	--	187	--	203	--	--
OZMW-18D	OU-1 Union Boulevard	102	--	--	130	--	--	--	57	--	34	--	--
OU2MW-50S	OU-1 Union Boulevard (Ext.)	274	--	--	289	--	--	258	--	--	294	--	--
OU2MW-50I	OU-1 Union Boulevard (Ext.)	183	--	--	214	--	--	253	--	--	216	--	--
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	190	--	--	190	--	--	196	--	--	209	--	--
OU2MW-50D	OU-1 Union Boulevard (Ext.)	11	--	--	39	--	--	36	--	--	42	--	--

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 OU-1 Oxygen Injection System
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Well ID	Oxygen Injection System	2018								2019				2020			2021	
		Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2
pH (SU)																		
OU2MW-57S	66 North Clinton	5.76	--	--	5.49	--	--	6.14	6.09	5.85	5.74	6.36	6.49	6.39	5.95	5.99	6.32	5.55
OU2MW-57I	66 North Clinton	5.47	--	--	5.77	--	--	6.16	6.03	6.03	6.46	6.38	5.74	6.07	6.15	5.95	6.27	5.68
OU2MW-57I2	66 North Clinton	5.41	--	--	5.45	--	--	5.52	5.60	5.34	5.68	5.27	5.18	5.52	5.39	5.49	5.61	4.79
OZMW-16S	OU-1 Union Boulevard	6.47	--	--	7.02	--	--	7.03	7.22	6.43	7.41	7.28	7.57	6.90	6.85	6.92	6.98	6.99
OZMW-16I	OU-1 Union Boulevard	6.75	--	--	7.29	--	--	7.04	6.20	6.78	7.25	7.70	7.86	7.41	7.12	7.13	7.13	7.13
OZMW-16I2	OU-1 Union Boulevard	5.80	--	--	6.21	--	--	6.25	6.46	5.3	5.56	5.98	6.44	5.73	5.48	6.35	6.31	6.67
OZMW-16D	OU-1 Union Boulevard	4.61	--	--	4.90	--	--	4.89	5.34	4.22	5.15	5.21	4.98	4.70	4.92	5.10	6.80	6.48
OZMW-17S	OU-1 Union Boulevard	6.36	--	--	--	6.01	--	6.78	6.82	6.29	7.07	7.33	6.93	7.21	6.70	6.78	6.80	6.63
OZMW-17I	OU-1 Union Boulevard	6.73	--	--	--	7.22	--	7.06	6.99	6.68	7.40	7.69	7.01	7.68	7.11	7.09	7.27	7.09
OZMW-17I2	OU-1 Union Boulevard	5.76	--	--	--	6.35	--	6.36	6.65	5.69	6.18	6.30	6.72	6.70	5.83	5.93	6.03	5.64
OZMW-17D	OU-1 Union Boulevard	4.70	--	--	--	4.95	--	5.02	5.20	4.54	5.40	5.51	5.12	5.54	5.16	5.08	5.23	4.99
OZMW-18S	OU-1 Union Boulevard	--	6.66	--	--	7.23	--	7.02	7.14	7.12	7.26	7.70	7.07	7.25	7.05	7.37	7.35	6.80
OZMW-18I	OU-1 Union Boulevard	--	7.02	--	--	7.45	--	7.39	7.42	6.37	7.19	7.92	8.09	7.49	7.35	7.56	7.46	7.04
OZMW-18I2	OU-1 Union Boulevard	--	5.98	--	--	6.36	--	6.66	6.53	5.35	6.25	6.89	6.08	6.21	5.94	6.08	6.59	5.52
OZMW-18D	OU-1 Union Boulevard	--	5.35	--	--	5.51	--	5.21	5.09	5.23	5.73	5.87	6.07	5.53	5.55	5.55	5.87	4.96
OU2MW-50S	OU-1 Union Boulevard (Ext.)	4.93	--	--	5.14	--	--	5.61	5.80	5.67	5.65	5.63	5.94	5.11	5.63	5.55	6.04	6.43
OU2MW-50I	OU-1 Union Boulevard (Ext.)	5.38	--	--	5.99	--	--	5.98	5.78	6.6	6.96	7.12	7.17	6.49	7.12	6.09	6.62	6.93
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	4.82	--	--	5.37	--	--	5.31	5.33	5.49	5.10	5.74	5.15	5.45	5.25	5.05	5.47	5.54
OU2MW-50D	OU-1 Union Boulevard (Ext.)	5.15	--	--	5.32	--	--	5.48	5.73	5.52	5.51	5.98	5.36	5.51	5.49	4.38	5.08	5.74
Conductivity (mS/cm)																		
OU2MW-57S	66 North Clinton	0.411	--	--	0.191	--	--	0.215	0.307	0.214	0.210	0.248	0.450	0.233	0.295	0.237	0.195	0.175
OU2MW-57I	66 North Clinton	0.546	--	--	0.245	--	--	0.408	0.356	0.448	0.490	0.466	0.542	0.508	0.394	0.310	0.378	0.320
OU2MW-57I2	66 North Clinton	0.358	--	--	0.177	--	--	0.161	0.265	0.309	0.398	0.230	0.257	0.365	0.315	0.376	0.335	0.278
OZMW-16S	OU-1 Union Boulevard	0.540	--	--	0.350	--	--	0.233	0.220	0.241	0.339	0.201	0.178	0.277	0.190	0.211	0.002	0.420
OZMW-16I	OU-1 Union Boulevard	0.898	--	--	0.479	--	--	0.486	0.369	0.572	0.824	0.539	0.371	0.623	0.533	0.438	0.004	0.593
OZMW-16I2	OU-1 Union Boulevard	0.725	--	--	0.360	--	--	0.363	0.387	0.303	0.469	0.279	0.337	0.299	0.327	0.403	0.001	0.305
OZMW-16D	OU-1 Union Boulevard	0.253	--	--	0.164	--	--	0.141	0.151	0.198	0.204	0.140	0.157	0.178	0.162	0.085	0.000	0.022
OZMW-17S	OU-1 Union Boulevard	0.813	--	--	--	0.387	--	0.325	0.386	0.444	0.679	0.402	0.355	0.455	0.298	0.333	0.811	0.424
OZMW-17I	OU-1 Union Boulevard	0.865	--	--	--	0.583	--	0.532	0.480	0.555	0.665	0.455	0.390	0.564	0.480	0.503	0.506	0.420
OZMW-17I2	OU-1 Union Boulevard	0.792	--	--	--	0.332	--	0.303	0.437	0.393	0.521	0.368	0.385	0.489	0.345	0.351	0.518	0.286
OZMW-17D	OU-1 Union Boulevard	0.359	--	--	--	0.178	--	0.200	0.220	0.18	0.230	0.198	0.175	0.278	0.265	0.252	0.250	0.193
OZMW-18S	OU-1 Union Boulevard	--	0.237	--	--	0.327	--	0.292	0.371	0.384	0.482	0.309	0.267	0.479	0.343	0.441	0.420	0.361
OZMW-18I	OU-1 Union Boulevard	--	0.754	--	--	0.370	--	0.454	0.467	0.496	0.699	0.502	0.494	0.549	0.463	0.518	0.447	0.380
OZMW-18I2	OU-1 Union Boulevard	--	0.757	--	--	0.359	--	0.369	0.446	0.469	0.567	0.452	0.318	0.492	0.429	0.480	0.389	0.337
OZMW-18D	OU-1 Union Boulevard	--	0.686	--	--	0.327	--	0.283	0.456	0.457	0.484	0.321	0.433	0.498	0.387	0.441	0.348	0.323
OU2MW-50S	OU-1 Union Boulevard (Ext.)	0.207	--	--	0.143	--	--	0.119	0.157	0.14	0.224	0.138	0.097	0.158	0.098	0.141	0.150	0.196
OU2MW-50I	OU-1 Union Boulevard (Ext.)	0.524	--	--	0.342	--	--	0.293	0.395	0.502	0.652	0.519	0.599	0.645	0.194	0.508	0.526	0.568
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	0.582	--	--	0.302	--	--	0.294	0.393	0.234	0.407	0.292	0.257	0.495	0.290	0.388	0.368	0.358
OU2MW-50D	OU-1 Union Boulevard (Ext.)	0.182	--	--	0.101	--	--	0.088	0.149	0.105	0.188	0.133	0.104	0.160	0.111	0.150	0.138	0.127
Dissolved Oxygen (mg/L)																		
OU2MW-57S	66 North Clinton	0.85	--	--	1.97	--	--	0.64	2.55	0	0.00	1.76	4.84	0.00	3.35	2.06	0.35	7.42
OU2MW-57I	66 North Clinton	1.74	--	--	1.45	--	--	0.00	0.00	1.96	0.00	3.82	0.85	3.22	0.64	2.65	0.34	9.75
OU2MW-57I2	66 North Clinton	1.76	--	--	1.61	--	--	1.29	0.00	0	0.00	1.45	0.82	0.58	0.18	1.04	0.00	5.35
OZMW-16S	OU-1 Union Boulevard	22.46	--	--	17.96	--	--	34.14	33.54	35.72	29.11	26.88	40.54	37.82	28.01	25.31	20.82	30.40
OZMW-16I	OU-1 Union Boulevard	24.40	--	--	19.00	--	--	37.62	22.95	47.59	28.18	29.43	50.00	31.23	33.47	31.76	23.25	42.46
OZMW-16I2	OU-1 Union Boulevard	5.57	--	--	10.22	--	--	28.39	30.08	25.98	19.42	17.81	43.97	27.60	31.50	26.60	15.99	12.02
OZMW-16D	OU-1 Union Boulevard	0.67	--	--	0.00	--	--	0.00	0.00	0	0.00	0.00	0.00	0.17	0.04	2.14	8.22	1.42
OZMW-17S	OU-1 Union Boulevard	10.00	--	--	--	16.00	--	26.00	13.00	16.46	21.00	19.00	17.00	28.00	24.00	20.00	24.29	4.00
OZMW-17I	OU-1 Union Boulevard	11.00	--	--	--	20.00	--	26.00	7.00	25.52	25.00	29.00	27.00	26.00	25.00	27.00	17.86	2.00
OZMW-17I2	OU-1 Union Boulevard	16.00	--	--	--	19.00	--	27.00	18.00	25	22.00	27.00	33.00	22.00	26.00	25.00	17.18	10.00
OZMW-17D	OU-1 Union Boulevard	11.00	--	--	--	17.00	--	14.88	31.00	22	23.00	21.00	32.00	21.00	24.00	29.00	19.18	3.00
OZMW-18S	OU-1 Union Boulevard	--	19.21	--	--	19.19	--	15.49	24.00	11	29.87	28.56	21.38	37.33	24.67	24.92	23.81	16.90
OZMW-18I	OU-1 Union Boulevard	--	12.68	--	--	10.45	--	9.55	16.00	16	24.92	11.58	13.89	17.90	14.05	12.71	25.33	9.39
OZMW-18I2	OU-1 Union Boulevard	--	19.00	--	--	27.00	--	9.83	19.00	16	18.00	23.00	19.00	21.00	26.00	19.00	10.00	5.00
OZMW-18D	OU-1 Union Boulevard	--	1.00	--	--	14.00	--	11.43	21.00	20	17.00	16.00	23.00	20.00	21.00	25.97	4.00	4.00
OU2MW-50S	OU-1 Union Boulevard (Ext.)	22.52	--	--	17.70	--	--	18.75	30.15	29.52	35.16	28.85	36.51	45.41	22.08	30.49	39.18	25.55
OU2MW-50I	OU-1 Union Boulevard (Ext.)	36.64	--	--	24.38	--	--	21.51	50.00	42.54	50.00	32.66	46.77	47.86	28.24	38.20	22.00	30.19
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	1.59	--	--	10.53	--	--	9.92	15.90	4.17	0.23	0.00	0.25	24.16	6.75	1.97	13.51	14.20
OU2MW-50D	OU-1 Union Boulevard (Ext.)	0.55	--	--	0.45	--	--	0.00	0.33	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Temperature (degrees Celcius)																		
OU2MW-57S	66 North Clinton	12.28	--	--	13.98	--	--	21.80	17.31	11.54	14.17	20.96	20.07	11.27	20.36	18.71	13.35	12.39
OU2MW-57I	66 North Clinton	14.44	--	--	16.22	--	--	18.04	14.07	11.09	13.56	14.91	16.07	14.71	16.16	16.44	15.24	13.22

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 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2018								2019				2020			2021	
		Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2
pH (SU)																		
OU2MW-57I2	66 North Clinton	14.45	--	--	16.42	--	--	20.16	15.25	12.86	14.39	15.70	15.23	13.61	15.44	15.34	14.55	13.76
OZMW-16S	OU-1 Union Boulevard	11.12	--	--	14.85	--	--	19.25	17.64	11.26	11.95	16.64	17.06	11.96	18.14	15.82	11.70	11.99
OZMW-16I	OU-1 Union Boulevard	12.14	--	--	16.27	--	--	18.59	17.11	12.08	13.40	15.90	15.02	12.14	16.79	14.29	12.07	17.76
OZMW-16I2	OU-1 Union Boulevard	12.18	--	--	16.60	--	--	18.69	13.01	11.94	13.75	20.26	14.86	11.28	17.09	13.62	10.37	12.91
OZMW-16D	OU-1 Union Boulevard	11.36	--	--	16.76	--	--	19.11	14.95	11.57	13.95	20.19	14.96	11.81	17.27	13.72	14.28	13.07
OZMW-17S	OU-1 Union Boulevard	11.01	--	--	--	15.61	--	20.20	16.05	16.46	12.48	16.75	18.43	12.59	17.88	16.53	12.99	12.62
OZMW-17I	OU-1 Union Boulevard	12.74	--	--	--	17.25	--	24.67	14.45	12.85	13.72	17.00	15.99	13.75	15.86	15.24	13.96	14.80
OZMW-17I2	OU-1 Union Boulevard	12.10	--	--	--	18.04	--	24.10	13.57	11.39	15.47	17.06	16.11	12.36	15.64	14.26	11.49	14.05
OZMW-17D	OU-1 Union Boulevard	11.15	--	--	--	18.39	--	21.21	13.55	11.53	14.10	18.70	16.08	11.60	15.47	13.68	13.10	13.59
OZMW-18S	OU-1 Union Boulevard	--	11.77	--	--	15.46	--	21.51	16.34	8.23	12.07	17.30	18.52	12.88	18.66	16.06	13.33	12.35
OZMW-18I	OU-1 Union Boulevard	--	12.63	--	--	16.81	--	19.61	14.70	12.35	13.55	16.15	17.05	13.79	16.14	15.43	13.95	13.14
OZMW-18I2	OU-1 Union Boulevard	--	12.52	--	--	17.45	--	19.14	13.77	12.15	13.38	16.22	16.67	11.73	17.83	14.72	12.47	13.74
OZMW-18D	OU-1 Union Boulevard	--	12.17	--	--	17.45	--	21.45	13.05	11.77	13.21	18.68	17.07	12.30	17.52	14.78	13.01	13.85
OU2MW-50S	OU-1 Union Boulevard (Ext.)	14.00	--	--	12.85	--	--	21.43	17.47	12.34	13.79	17.76	18.47	12.08	25.88	14.51	12.31	13.10
OU2MW-50I	OU-1 Union Boulevard (Ext.)	13.11	--	--	15.81	--	--	22.49	13.88	12.33	15.09	17.64	16.48	13.37	23.81	14.72	12.90	14.56
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	11.92	--	--	16.10	--	--	21.41	13.79	13.22	15.38	19.91	16.70	12.28	25.01	13.99	12.71	14.20
OU2MW-50D	OU-1 Union Boulevard (Ext.)	11.93	--	--	15.68	--	--	21.88	14.14	12.97	15.49	17.80	16.72	12.21	25.59	12.44	12.73	13.80
Oxidation Reduction Potential (mV)																		
OU2MW-57S	66 North Clinton	-78	--	--	167	--	--	-4	11	12	12	-17	-70	291	-22	54	-28	73
OU2MW-57I	66 North Clinton	95	--	--	203	--	--	194	210	250	112	164	218	118	133	146	134	140
OU2MW-57I2	66 North Clinton	148	--	--	257	--	--	299	281	178	137	271	307	177	228	264	243	38
OZMW-16S	OU-1 Union Boulevard	-84	--	--	307	--	--	227	214	209	203	243	197	139	287	267	149	208
OZMW-16I	OU-1 Union Boulevard	103	--	--	277	--	--	229	200	225	264	229	201	435	283	268	187	164
OZMW-16I2	OU-1 Union Boulevard	125	--	--	287	--	--	247	275	254	289	252	190	485	276	283	186	207
OZMW-16D	OU-1 Union Boulevard	89	--	--	234	--	--	157	167	166	139	127	99	113	123	197	72	138
OZMW-17S	OU-1 Union Boulevard	83	--	--	--	349	--	148	107	142	216	133	134	133	175	213	177	191
OZMW-17I	OU-1 Union Boulevard	82	--	--	--	288	--	213	208	187	194	241	385	135	304	265	191	208
OZMW-17I2	OU-1 Union Boulevard	150	--	--	--	317	--	277	194	240	327	269	218	440	336	302	239	259
OZMW-17D	OU-1 Union Boulevard	128	--	--	--	280	--	199	182	171	153	108	166	460	146	201	139	130
OZMW-18S	OU-1 Union Boulevard	--	117	--	--	208	--	249	223	212	206	148	266	156	160	175	133	86
OZMW-18I	OU-1 Union Boulevard	--	102	--	--	175	--	115	177	172	160	229	117	147	181	155	145	99
OZMW-18I2	OU-1 Union Boulevard	--	102	--	--	200	--	189	145	152	94	145	181	431	207	136	171	163
OZMW-18D	OU-1 Union Boulevard	--	0	--	--	191	--	142	152	100	55	65	36	449	76	69	60	72
OU2MW-50S	OU-1 Union Boulevard (Ext.)	221	--	--	371	--	--	298	238	275	248	268	229	242	278	171	237	244
OU2MW-50I	OU-1 Union Boulevard (Ext.)	-210	--	--	363	--	--	286	270	224	202	229	215	206	281	222	205	207
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	190	--	--	332	--	--	327	277	229	273	210	265	461	264	247	255	280
OU2MW-50D	OU-1 Union Boulevard (Ext.)	-18	--	--	156	--	--	63	61	67	36	43	39	254	23	73	77	96

Appendix E - Table E-1
 Summary of Groundwater Parameter Data
 OU-1 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2021		2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
		Q3	Q4	Q1	Q2			
pH (SU)								
OU2MW-57S	66 North Clinton	6.41	6.47	5.76	5.83	NS	5.90	6.12
OU2MW-57I	66 North Clinton	6.45	6.52	5.62	5.79	NS	5.76	6.10
OU2MW-57I2	66 North Clinton	5.94	5.86	4.89	5.11	NS	5.60	5.45
OZMW-16S	OU-1 Union Boulevard	7.26	6.85	6.31	7.19	6.32	6.68	6.90
OZMW-16I	OU-1 Union Boulevard	7.40	7.35	6.80	7.29	5.95	6.69	7.21
OZMW-16I2	OU-1 Union Boulevard	5.96	5.73	6.85	5.64	5.46	5.99	6.05
OZMW-16D	OU-1 Union Boulevard	6.01	5.88	5.63	5.72	5.08	4.87	5.81
OZMW-17S	OU-1 Union Boulevard	7.02	6.84	6.37	6.52	6.61	6.49	6.69
OZMW-17I	OU-1 Union Boulevard	7.52	7.34	6.72	7.01	6.54	6.72	7.15
OZMW-17I2	OU-1 Union Boulevard	6.01	5.97	5.06	5.20	5.66	5.80	5.56
OZMW-17D	OU-1 Union Boulevard	5.58	5.52	4.77	4.67	5.49	5.13	5.14
OZMW-18S	OU-1 Union Boulevard	7.51	6.98	7.16	7.29	6.08	6.85	7.24
OZMW-18I	OU-1 Union Boulevard	7.79	7.54	7.52	7.47	6.52	7.01	7.58
OZMW-18I2	OU-1 Union Boulevard	6.14	6.12	6.13	6.31	6.61	5.99	6.18
OZMW-18D	OU-1 Union Boulevard	5.86	5.85	5.78	5.55	5.92	5.26	5.76
OU2MW-50S	OU-1 Union Boulevard (Ext.)	6.18	6.73	5.91	5.09	5.87	5.48	5.98
OU2MW-50I	OU-1 Union Boulevard (Ext.)	6.56	6.90	6.51	6.33	5.49	5.91	6.58
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	5.47	6.16	5.40	5.10	4.85	5.08	5.53
OU2MW-50D	OU-1 Union Boulevard (Ext.)	5.65	6.14	5.53	5.01	5.35	5.37	5.58
Conductivity (mS/cm)								
OU2MW-57S	66 North Clinton	0.428	0.414	0.251	0.393	NS	0.396	0.37
OU2MW-57I	66 North Clinton	0.759	0.690	0.365	0.280	NS	0.445	0.52
OU2MW-57I2	66 North Clinton	0.235	0.297	0.266	0.230	NS	0.456	0.26
OZMW-16S	OU-1 Union Boulevard	0.244	0.235	0.283	0.289	0.645	0.537	0.26
OZMW-16I	OU-1 Union Boulevard	0.631	0.359	0.488	0.510	0.656	0.662	0.50
OZMW-16I2	OU-1 Union Boulevard	0.251	0.200	0.491	0.280	0.634	0.482	0.31
OZMW-16D	OU-1 Union Boulevard	0.170	0.162	0.206	0.175	2.190	0.207	0.18
OZMW-17S	OU-1 Union Boulevard	0.410	0.284	0.336	0.342	0.768	0.551	0.34
OZMW-17I	OU-1 Union Boulevard	0.444	0.396	0.468	0.492	0.601	0.639	0.45
OZMW-17I2	OU-1 Union Boulevard	0.403	0.381	0.459	0.419	0.382	0.496	0.42
OZMW-17D	OU-1 Union Boulevard	0.192	0.277	0.198	0.229	0.983	0.329	0.22
OZMW-18S	OU-1 Union Boulevard	0.400	0.326	0.358	0.426	0.641	0.487	0.38
OZMW-18I	OU-1 Union Boulevard	0.597	0.402	0.433	0.559	0.572	0.616	0.50
OZMW-18I2	OU-1 Union Boulevard	0.491	0.359	0.375	0.438	0.654	0.567	0.42
OZMW-18D	OU-1 Union Boulevard	0.374	0.263	0.242	0.260	1.910	0.570	0.28
OU2MW-50S	OU-1 Union Boulevard (Ext.)	0.144	0.160	0.119	0.102	0.240	0.213	0.13
OU2MW-50I	OU-1 Union Boulevard (Ext.)	0.454	0.464	0.587	0.407	0.493	0.483	0.48
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	0.462	0.459	0.458	0.394	0.269	0.405	0.44
OU2MW-50D	OU-1 Union Boulevard (Ext.)	0.139	0.143	0.148	0.112	0.505	0.225	0.14
Dissolved Oxygen (mg/L)								
OU2MW-57S	66 North Clinton	0.00	0.51	4.00	2.00	NS	3.05	1.63
OU2MW-57I	66 North Clinton	2.03	0.00	2.00	2.00	NS	2.22	1.51
OU2MW-57I2	66 North Clinton	0.42	0.00	1.00	2.00	NS	1.15	0.86
OZMW-16S	OU-1 Union Boulevard	36.10	5.15	8.00	15.00	19.3	29.43	16.06
OZMW-16I	OU-1 Union Boulevard	25.75	8.46	7.00	16.00	26.0	33.58	14.30
OZMW-16I2	OU-1 Union Boulevard	23.14	0.00	10.00	18.00	0.7	18.37	12.79
OZMW-16D	OU-1 Union Boulevard	0.00	0.00	0.00	1.00	0.0	1.44	0.25
OZMW-17S	OU-1 Union Boulevard	13.00	4.00	5.00	15.00	12.8	18.98	9.25
OZMW-17I	OU-1 Union Boulevard	20.00	11.00	6.00	17.00	16.1	25.61	13.50
OZMW-17I2	OU-1 Union Boulevard	24.00	11.00	13.00	19.00	3.1	12.36	16.75
OZMW-17D	OU-1 Union Boulevard	21.00	19.00	3.00	17.00	0.1	8.02	15.00
OZMW-18S	OU-1 Union Boulevard	17.11	8.11	12.00	18.00	17.6	24.93	13.81
OZMW-18I	OU-1 Union Boulevard	11.06	13.31	1.00	14.00	3.5	16.49	9.84
OZMW-18I2	OU-1 Union Boulevard	10.00	13.00	12.00	12.00	1.3	18.82	11.75
OZMW-18D	OU-1 Union Boulevard	1.00	2.00	9.00	10.00	0.0	15.21	5.50
OU2MW-50S	OU-1 Union Boulevard (Ext.)	28.12	16.41	22.00	18.00	0.3	27.65	21.13
OU2MW-50I	OU-1 Union Boulevard (Ext.)	32.80	35.55	21.00	7.00	0.2	24.74	24.09
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	12.87	10.82	14.00	4.00	5.1	9.90	10.42
OU2MW-50D	OU-1 Union Boulevard (Ext.)	1.35	1.53	0.00	1.00	0.3	0.97	0.97
Temperature (degrees Celcius)								
OU2MW-57S	66 North Clinton	23.35	22.12	10.37	11.72	NS	16.2	16.89
OU2MW-57I	66 North Clinton	19.21	17.52	12.47	13.40	NS	15.0	15.65

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Well ID	Oxygen Injection System	2021		2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
		Q3	Q4	Q1	Q2			
pH (SU)								
OU2MW-57I2	66 North Clinton	23.03	15.71	12.18	13.97	NS	15.1	16.22
OZMW-16S	OU-1 Union Boulevard	17.64	18.22	12.99	12.24	14.8	14.6	15.27
OZMW-16I	OU-1 Union Boulevard	18.30	15.97	13.16	13.23	14.4	14.6	15.17
OZMW-16I2	OU-1 Union Boulevard	15.41	15.36	12.79	12.95	14.0	14.4	14.13
OZMW-16D	OU-1 Union Boulevard	14.70	15.18	9.77	12.84	13.6	14.4	13.12
OZMW-17S	OU-1 Union Boulevard	19.39	18.89	13.45	12.35	15.2	15.1	16.02
OZMW-17I	OU-1 Union Boulevard	18.27	16.29	13.41	13.80	14.8	14.7	15.44
OZMW-17I2	OU-1 Union Boulevard	19.70	15.80	12.67	14.28	14.6	14.3	15.61
OZMW-17D	OU-1 Union Boulevard	18.37	15.43	13.10	12.64	14.2	14.4	14.89
OZMW-18S	OU-1 Union Boulevard	20.33	19.10	12.62	12.29	14.5	14.9	16.09
OZMW-18I	OU-1 Union Boulevard	17.35	16.74	13.87	12.41	14.5	15.0	15.09
OZMW-18I2	OU-1 Union Boulevard	17.03	16.80	13.52	12.67	15.1	14.5	15.01
OZMW-18D	OU-1 Union Boulevard	18.53	16.47	13.09	13.08	14.1	14.5	15.29
OU2MW-50S	OU-1 Union Boulevard (Ext.)	16.98	18.79	11.24	12.04	10.4	15.1	14.76
OU2MW-50I	OU-1 Union Boulevard (Ext.)	16.76	16.38	11.95	13.61	12.4	15.0	14.68
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	15.43	18.59	11.83	13.77	13.1	14.9	14.91
OU2MW-50D	OU-1 Union Boulevard (Ext.)	15.93	16.12	11.85	13.95	12.1	14.7	14.46
Oxidation Reduction Potential (mV)								
OU2MW-57S	66 North Clinton	-10	-33	26	59	NS	-8	10.50
OU2MW-57I	66 North Clinton	185	103	181	143	NS	142	153.00
OU2MW-57I2	66 North Clinton	193	206	172	199	NS	173	192.50
OZMW-16S	OU-1 Union Boulevard	106	72	108	155	106	179	110.25
OZMW-16I	OU-1 Union Boulevard	226	63	140	163	187	204	148.00
OZMW-16I2	OU-1 Union Boulevard	229	125	157	209	80	144	180.00
OZMW-16D	OU-1 Union Boulevard	-9	-50	-24	15	65	134	-17.00
OZMW-17S	OU-1 Union Boulevard	156	54	68	139	33	155	104.25
OZMW-17I	OU-1 Union Boulevard	167	98	113	153	61	176	132.75
OZMW-17I2	OU-1 Union Boulevard	256	185	256	265	107	201	240.50
OZMW-17D	OU-1 Union Boulevard	133	64	140	213	32	101	137.50
OZMW-18S	OU-1 Union Boulevard	145	64	133	201	51	158	135.75
OZMW-18I	OU-1 Union Boulevard	157	104	117	213	-48	141	147.75
OZMW-18I2	OU-1 Union Boulevard	173	60	173	241	-81	172	161.75
OZMW-18D	OU-1 Union Boulevard	70	-27	14	182	-53	79	59.75
OU2MW-50S	OU-1 Union Boulevard (Ext.)	260	156	171	262	-76	231	212.25
OU2MW-50I	OU-1 Union Boulevard (Ext.)	253	181	200	222	126	192	214.00
OU2MW-50I2	OU-1 Union Boulevard (Ext.)	272	130	210	260	74	229	218.00
OU2MW-50D	OU-1 Union Boulevard (Ext.)	61	-16	37	84	-46	47	41.50

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
 OU-2 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2004			2005							2006						
		Apr-04	Aug-04	Dec-04	Mar-05	Jun-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06
pH (SU)																		
OU2MW-30S	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I3	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39S	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	Montauk Highway	--	--	--	--	--	6.88	--	--	--	--	--	6.97	6.62	--	--	6.81	--
OU2MW-02I	Montauk Highway	--	--	--	--	--	6.12	--	--	--	--	--	6.23	--	--	--	6.22	--
OU2MW-02I2	Montauk Highway	--	--	--	--	--	6.14	--	--	--	--	--	6.33	--	--	--	5.83	--
OU2MW-02D	Montauk Highway	--	--	--	--	--	5.74	--	--	--	--	--	5.69	--	--	--	4.97	--
Conductivity (mS/cm)																		
OU2MW-30S	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I3	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39S	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	Montauk Highway	--	--	--	--	--	0.405	--	--	--	--	--	0.565	0.885	--	--	0.514	--
OU2MW-02I	Montauk Highway	--	--	--	--	--	0.178	--	--	--	--	--	0.263	--	--	--	0.199	--
OU2MW-02I2	Montauk Highway	--	--	--	--	--	0.122	--	--	--	--	--	0.100	--	--	--	0.067	--
OU2MW-02D	Montauk Highway	--	--	--	--	--	0.037	--	--	--	--	--	0.049	--	--	--	0.036	--
Dissolved Oxygen (mg/L)																		
OU2MW-30S	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I3	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39S	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	Montauk Highway	--	--	--	--	--	1.8	--	--	--	--	--	0.0	0.0	--	--	1.1	--
OU2MW-02I	Montauk Highway	--	--	--	--	--	0.4	--	--	--	--	--	0.0	--	--	--	1.6	--
OU2MW-02I2	Montauk Highway	--	--	--	--	--	0.5	--	--	--	--	--	0.0	--	--	--	1.5	--
OU2MW-02D	Montauk Highway	--	--	--	--	--	0.9	--	--	--	--	--	0.0	--	--	--	1.6	--

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 Summary of Groundwater Parameter Data
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 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2004			2005								2006					
		Apr-04	Aug-04	Dec-04	Mar-05	Jun-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06
Temperature (degrees Celcius)																		
OU2MW-30S	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I3	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39S	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	Montauk Highway	--	--	--	--	--	16.7	--	--	--	--	--	11.8	13.5	--	--	16.3	--
OU2MW-02I	Montauk Highway	--	--	--	--	--	18.0	--	--	--	--	--	12.4	--	--	--	16.1	--
OU2MW-02I2	Montauk Highway	--	--	--	--	--	16.0	--	--	--	--	--	11.7	--	--	--	15.2	--
OU2MW-02D	Montauk Highway	--	--	--	--	--	17.2	--	--	--	--	--	11.6	--	--	--	14.4	--
Oxidation Reduction Potential (mV)																		
OU2MW-30S	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30I3	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-30D2	9 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39S	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	33 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	34 North Clinton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	Cooper Lane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	Montauk Highway	--	--	--	--	--	-183	--	--	--	--	--	-155	-115	--	--	-176	--
OU2MW-02I	Montauk Highway	--	--	--	--	--	101	--	--	--	--	--	51	--	--	--	69	--
OU2MW-02I2	Montauk Highway	--	--	--	--	--	-6	--	--	--	--	--	-33	--	--	--	-15	--
OU2MW-02D	Montauk Highway	--	--	--	--	--	69	--	--	--	--	--	26	--	--	--	105	--

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Well ID	2006					2007			
	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07
pH (SU)									
OU2MW-30S	--	--	--	--	--	--	--	--	--
OU2MW-30I	--	--	--	--	--	--	--	--	--
OU2MW-30I2	--	--	--	--	--	--	--	--	--
OU2MW-30I3	--	--	--	--	--	--	--	--	--
OU2MW-30D	--	--	--	--	--	--	--	--	--
OU2MW-30D2	--	--	--	--	--	--	--	--	--
OU2MW-39S	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--
OU2MW-02S	--	6.72	--	7.15	--	--	--	6.26	--
OU2MW-02I	--	6.26	--	6.61	--	--	--	5.48	--
OU2MW-02I2	--	6.11	--	6.43	--	--	--	6.20	--
OU2MW-02D	--	5.27	--	--	--	--	--	5.40	--
Conductivity (mS/cm)									
OU2MW-30S	--	--	--	--	--	--	--	--	--
OU2MW-30I	--	--	--	--	--	--	--	--	--
OU2MW-30I2	--	--	--	--	--	--	--	--	--
OU2MW-30I3	--	--	--	--	--	--	--	--	--
OU2MW-30D	--	--	--	--	--	--	--	--	--
OU2MW-30D2	--	--	--	--	--	--	--	--	--
OU2MW-39S	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--
OU2MW-02S	--	0.406	--	0.444	--	--	--	0.432	--
OU2MW-02I	--	0.201	--	0.230	--	--	--	0.271	--
OU2MW-02I2	--	0.064	--	0.068	--	--	--	0.087	--
OU2MW-02D	--	0.036	--	--	--	--	--	0.050	--
Dissolved Oxygen (mg/L)									
OU2MW-30S	--	--	--	--	--	--	--	--	--
OU2MW-30I	--	--	--	--	--	--	--	--	--
OU2MW-30I2	--	--	--	--	--	--	--	--	--
OU2MW-30I3	--	--	--	--	--	--	--	--	--
OU2MW-30D	--	--	--	--	--	--	--	--	--
OU2MW-30D2	--	--	--	--	--	--	--	--	--
OU2MW-39S	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--
OU2MW-02S	--	0.0	--	0.0	--	--	--	20.0	--
OU2MW-02I	--	0.0	--	0.0	--	--	--	0.0	--
OU2MW-02I2	--	0.0	--	0.0	--	--	--	0.0	--
OU2MW-02D	--	0.0	--	--	--	--	--	0.0	--

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Well ID	2006					2007			
	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07
Temperature (degrees Celcius)									
OU2MW-30S	--	--	--	--	--	--	--	--	--
OU2MW-30I	--	--	--	--	--	--	--	--	--
OU2MW-30I2	--	--	--	--	--	--	--	--	--
OU2MW-30I3	--	--	--	--	--	--	--	--	--
OU2MW-30D	--	--	--	--	--	--	--	--	--
OU2MW-30D2	--	--	--	--	--	--	--	--	--
OU2MW-39S	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--
OU2MW-02S	--	17.8	--	17.2	--	--	--	11.5	--
OU2MW-02I	--	16.6	--	14.0	--	--	--	11.1	--
OU2MW-02I2	--	17.9	--	15.1	--	--	--	13.0	--
OU2MW-02D	--	19.9	--	--	--	--	--	11.2	--
Oxidation Reduction Potential									
OU2MW-30S	--	--	--	--	--	--	--	--	--
OU2MW-30I	--	--	--	--	--	--	--	--	--
OU2MW-30I2	--	--	--	--	--	--	--	--	--
OU2MW-30I3	--	--	--	--	--	--	--	--	--
OU2MW-30D	--	--	--	--	--	--	--	--	--
OU2MW-30D2	--	--	--	--	--	--	--	--	--
OU2MW-39S	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--
OU2MW-02S	--	-145	--	-131	--	--	--	57	--
OU2MW-02I	--	118.2	--	40	--	--	--	52	--
OU2MW-02I2	--	-25	--	-3	--	--	--	-25	--
OU2MW-02D	--	85	--	--	--	--	--	65	--

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Well ID	2007									2008										
	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
pH (SU)																				
OU2MW-30S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.24	--	--	6.58
OU2MW-30I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.63	--	--	7.03
OU2MW-30I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.53	--	--	6.95
OU2MW-30I3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.09	--	--	6.50
OU2MW-30D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.00	--	--	6.34
OU2MW-30D2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.21	--	--	6.49
OU2MW-39S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	6.49	--	--	--	6.63	--	6.29	--	--	6.40	--	--	6.32	--	--	--	6.12	--	6.27	--
OU2MW-02I	6.06	--	--	--	6.61	--	6.16	--	--	5.98	--	--	5.74	--	--	--	6.19	--	6.31	--
OU2MW-02I2	5.99	--	--	--	6.46	--	6.16	--	--	6.01	--	--	6.30	--	--	--	5.98	--	6.16	--
OU2MW-02D	5.64	--	--	--	5.64	--	5.34	--	--	5.50	--	--	5.07	--	--	--	5.33	--	5.80	--
Conductivity (mS/cm)																				
OU2MW-30S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.627	--	--	0.434
OU2MW-30I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.905	--	--	0.522
OU2MW-30I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.379	--	--	0.463
OU2MW-30I3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.904	--	--	0.589
OU2MW-30D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.343	--	--	0.582
OU2MW-30D2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.642	--	--	0.482
OU2MW-39S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	0.654	--	--	--	0.390	--	0.448	--	--	0.453	--	--	0.467	--	--	--	0.913	--	0.596	--
OU2MW-02I	0.301	--	--	--	0.186	--	0.237	--	--	0.230	--	--	0.201	--	--	--	0.460	--	0.271	--
OU2MW-02I2	0.093	--	--	--	0.072	--	0.071	--	--	0.080	--	--	0.064	--	--	--	0.152	--	0.930	--
OU2MW-02D	0.042	--	--	--	0.038	--	0.035	--	--	0.039	--	--	0.046	--	--	--	0.078	--	0.057	--
Dissolved Oxygen (mg/L)																				
OU2MW-30S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--	0.0
OU2MW-30I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--	0.0
OU2MW-30I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0	--	--	0.0
OU2MW-30I3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--	0.0
OU2MW-30D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6	--	--	0.0
OU2MW-30D2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--	0.0
OU2MW-39S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	0.0	--	--	--	0.1	--	10.5	--	--	3.7	--	--	0.0	--	--	--	4.5	--	3.5	--
OU2MW-02I	0.0	--	--	--	0.0	--	2.1	--	--	1.0	--	--	0.0	--	--	--	0.0	--	0.0	--
OU2MW-02I2	0.0	--	--	--	0.0	--	0.0	--	--	0.0	--	--	0.0	--	--	--	0.0	--	0.0	--
OU2MW-02D	0.0	--	--	--	0.0	--	0.0	--	--	0.0	--	--	0.0	--	--	--	0.0	--	0.0	--

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
 OU-2 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	2007								2008											
	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Temperature (degrees Celcius)																				
OU2MW-30S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20.6	--	--	13.5
OU2MW-30I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.6	--	--	13.8
OU2MW-30I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.6	--	--	13.8
OU2MW-30I3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.3	--	--	13.1
OU2MW-30D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.3	--	--	13.3
OU2MW-30D2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.5	--	--	13.3
OU2MW-39S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	13.2	--	--	--	21.1	--	11.2	--	--	7.6	--	--	13.5	--	--	--	21.2	--	12.8	--
OU2MW-02I	13.6	--	--	--	19.8	--	11.4	--	--	8.5	--	--	13.6	--	--	--	19.6	--	11.7	--
OU2MW-02I2	12.4	--	--	--	18.8	--	11.6	--	--	9.7	--	--	12.2	--	--	--	15.9	--	12.2	--
OU2MW-02D	12.3	--	--	--	16.6	--	10.7	--	--	9.3	--	--	11.7	--	--	--	15.5	--	11.4	--
Oxidation Reduction Potential																				
OU2MW-30S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-1	--	--	12
OU2MW-30I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-141	--	--	-113
OU2MW-30I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-47	--	--	-64
OU2MW-30I3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	31	--	--	-32
OU2MW-30D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	113	--	--	73
OU2MW-30D2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-101	--	--	-146
OU2MW-39S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-39D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-47D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19I2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-19D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU2MW-02S	-84	--	--	--	-40	--	65	--	--	75	--	--	-61	--	--	--	-38	--	2	--
OU2MW-02I	59	--	--	--	32	--	73	--	--	22	--	--	-17	--	--	--	-40	--	-34	--
OU2MW-02I2	1	--	--	--	-15	--	18	--	--	-11	--	--	3	--	--	--	-17	--	8	--
OU2MW-02D	98	--	--	--	102	--	112	--	--	78	--	--	99	--	--	--	74	--	63	--

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 Bay Shore/Brightwaters Former MGP Site

Well ID	2009													2010							
	Baseline Jan-09	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	
pH (SU)																					
OU2MW-30S	--	--	6.01	5.90	6.39	5.97	5.68	6.34	5.99	5.77	5.81	5.81	4.97	6.20	6.30	6.15	5.96	6.12	5.92	5.75	
OU2MW-30I	--	--	6.27	6.16	6.30	6.05	5.95	6.12	5.97	6.28	5.88	6.40	4.54	6.19	6.18	6.10	6.01	6.10	5.74	6.07	
OU2MW-30I2	--	--	6.15	6.04	6.37	5.80	5.78	6.21	5.90	6.00	5.98	5.91	4.93	6.29	6.25	6.16	6.00	6.06	5.62	6.08	
OU2MW-30I3	--	--	5.72	5.72	6.14	6.10	5.01	6.00	5.70	5.56	7.38	5.66	5.09	5.98	6.11	6.06	4.71	5.96	4.91	5.75	
OU2MW-30D	--	--	5.64	5.59	6.10	6.04	4.72	5.93	5.63	5.57	7.44	6.14	4.80	5.85	6.01	5.83	4.66	5.61	4.48	5.51	
OU2MW-30D2	--	--	5.76	5.67	5.82	5.66	4.85	5.86	5.88	5.52	7.94	6.31	4.53	6.01	5.99	5.74	4.80	5.71	4.63	5.60	
OU2MW-39S	--	--	--	5.67	6.03	5.57	5.68	6.09	5.85	5.79	5.55	5.99	5.80	6.07	5.59	5.88	5.70	5.75	4.87	5.58	
OU2MW-39I	--	--	--	7.49	6.39	5.71	5.74	5.94	5.83	5.89	5.74	6.16	6.04	6.15	5.70	6.07	5.93	5.55	4.82	5.99	
OU2MW-39I2	--	--	--	5.60	4.95	5.81	4.76	4.92	4.78	4.57	4.43	6.08	4.48	4.69	4.17	4.77	4.67	4.57	3.78	4.77	
OU2MW-39D	--	--	--	6.97	5.38	4.95	5.11	5.30	5.14	4.97	4.79	6.58	5.16	5.20	4.80	5.18	5.15	4.90	4.29	4.99	
OU2MW-47S	6.33	6.09	5.78	5.44	5.90	5.55	5.40	4.34	5.28	5.89	5.86	6.05	5.86	6.00	5.88	5.35	5.68	5.19	5.36	5.74	
OU2MW-47I	6.55	6.25	6.18	5.84	6.38	6.41	5.98	4.70	6.02	6.32	6.24	6.03	5.81	6.15	6.21	6.13	6.29	5.80	6.20	6.41	
OU2MW-47I2	6.28	6.16	6.16	5.91	6.26	6.09	6.13	4.86	5.97	6.13	6.15	5.85	6.25	6.28	6.25	6.29	6.06	5.85	5.74	6.13	
OU2MW-47D	5.55	5.42	5.35	5.19	5.63	5.80	5.67	4.65	5.52	5.45	5.47	5.19	6.01	5.52	5.55	5.57	5.41	5.90	4.87	5.68	
OU2MW-19I	--	--	--	--	--	--	--	--	6.48	--	--	8.53	--	6.44	6.31	6.21	5.72	6.28	--	5.60	
OU2MW-19I2	--	--	--	--	--	--	--	--	--	5.84	--	6.04	--	5.85	6.00	5.96	5.63	5.52	--	5.41	
OU2MW-19D	--	--	--	--	--	--	--	--	5.87	--	--	8.30	--	6.11	6.07	5.96	5.75	5.89	--	5.32	
OU2MW-02S	--	--	5.92	--	--	6.35	--	--	--	6.55	--	6.28	--	--	5.80	--	6.19	--	--	--	
OU2MW-02I	--	--	6.01	--	--	6.34	--	--	--	6.22	--	7.79	--	--	6.29	--	6.18	--	--	--	
OU2MW-02I2	--	--	5.96	--	--	5.87	--	--	--	5.80	--	7.05	--	--	5.34	--	5.81	--	--	--	
OU2MW-02D	--	--	5.36	--	--	5.52	--	--	--	5.49	--	5.98	--	--	4.76	--	5.30	--	--	--	
Conductivity (mS/cm)																					
OU2MW-30S	--	--	0.393	0.420	0.391	0.412	0.278	0.297	0.322	0.359	0.306	0.281	0.325	0.268	0.241	0.249	0.361	0.271	0.241	0.201	
OU2MW-30I	--	--	0.511	0.535	0.596	0.718	0.530	0.633	0.702	0.709	0.619	0.691	0.442	0.730	0.569	0.955	0.771	0.498	0.430	0.365	
OU2MW-30I2	--	--	0.431	0.457	0.429	0.538	0.565	0.595	0.710	0.661	0.599	0.569	0.471	0.487	0.698	0.707	0.689	0.371	0.406	0.399	
OU2MW-30I3	--	--	0.689	0.730	0.595	0.474	0.616	0.507	0.587	0.609	0.640	0.498	0.558	0.469	0.492	0.470	0.680	0.498	0.432	0.343	
OU2MW-30D	--	--	0.638	0.661	0.590	0.477	0.748	0.536	0.609	0.681	0.743	0.656	0.541	0.708	0.453	0.601	0.608	0.395	0.399	0.315	
OU2MW-30D2	--	--	0.560	0.607	0.451	0.388	0.525	0.433	0.444	0.432	0.429	0.394	0.317	0.486	0.334	0.332	0.523	0.400	0.397	0.325	
OU2MW-39S	--	--	0.211	0.242	0.235	0.382	0.387	0.342	0.315	0.339	0.311	0.316	0.366	0.305	0.255	0.218	0.297	0.293	0.225	--	
OU2MW-39I	--	--	--	0.408	0.649	0.491	0.691	0.612	0.692	1.110	0.899	0.616	0.578	0.666	0.590	0.643	0.459	0.542	0.602	0.629	
OU2MW-39I2	--	--	--	0.233	0.342	0.351	0.327	0.383	0.573	0.487	0.427	0.419	0.353	0.414	0.447	0.440	0.494	0.538	0.558	0.391	
OU2MW-39D	--	--	--	0.133	0.138	0.018	0.429	0.600	0.615	0.827	0.770	0.723	0.545	0.673	0.835	0.910	0.789	0.899	0.706	0.525	
OU2MW-47S	0.303	0.350	0.265	0.320	0.256	0.177	0.263	0.268	0.222	0.303	0.327	0.439	0.390	0.414	0.250	0.229	0.203	0.300	0.363	0.413	
OU2MW-47I	0.640	0.960	0.662	1.020	0.722	0.502	0.674	0.565	0.359	0.390	0.366	0.455	0.291	0.941	0.758	0.689	0.656	0.820	0.915	0.920	
OU2MW-47I2	0.490	0.719	0.446	0.530	0.513	0.462	0.399	0.575	0.547	0.622	0.534	0.494	0.499	0.448	0.611	0.407	0.775	0.709	0.621	0.547	
OU2MW-47D	0.341	0.503	0.386	0.434	0.376	0.276	0.279	0.460	0.434	0.621	0.575	0.514	0.420	0.479	0.673	0.450	0.517	0.285	0.322	0.355	
OU2MW-19I	--	--	--	--	--	--	--	--	0.708	--	--	0.554	--	0.834	0.705	0.595	0.587	0.940	--	0.660	
OU2MW-19I2	--	--	--	--	--	--	--	--	--	0.561	--	0.545	--	0.599	0.445	1.200	0.567	0.497	--	0.481	
OU2MW-19D	--	--	--	--	--	--	--	--	1.270	--	--	1.350	--	1.370	1.420	1.200	1.170	1.380	--	1.520	
OU2MW-02S	--	--	0.479	--	--	0.412	--	--	--	0.674	--	0.522	--	--	0.602	--	1.350	--	--	--	
OU2MW-02I	--	--	0.279	--	--	0.279	--	--	--	0.297	--	0.612	--	--	0.336	--	0.286	--	--	--	
OU2MW-02I2	--	--	0.104	--	--	0.070	--	--	--	0.078	--	0.088	--	--	0.103	--	0.110	--	--	--	
OU2MW-02D	--	--	0.063	--	--	0.042	--	--	--	0.050	--	0.058	--	--	0.051	--	0.067	--	--	--	
Dissolved Oxygen (mg/L)																					
OU2MW-30S	--	--	0.0	0.0	22.0	21.0	13.7	11.6	23.0	28.0	26.0	25.0	0.9	23.0	28.0	28.0	26.0	11.4	27.0	24.0	
OU2MW-30I	--	--	0.0	1.0	25.0	18.1	10.6	16.2	27.0	34.0	27.0	8.9	51.0	22.0	37.0	33.0	28.0	14.6	27.0	26.0	
OU2MW-30I2	--	--	0.0	2.1	42.0	45.0	23.0	19.8	25.0	29.0	42.0	34.0	44.0	17.0	48.0	44.0	36.0	23.0	28.0	23.0	
OU2MW-30I3	--	--	0.0	15.8	37.0	29.0	20.0	20.0	25.0	35.0	36.0	18.7	0.8	52.0	48.0	35.0	34.0	24.0	36.0	27.0	
OU2MW-30D	--	--	0.0	2.1	32.0	20.0	27.0	19.5	29.0	40.0	39.0	28.0	35.0	38.0	49.0	43.0	29.0	31.0	31.0	27.0	
OU2MW-30D2	--	--	0.0	0.0	29.0	17.6	9.1	3.0	0.0	2.5	14.6	18.0	55.0	30.0	32.0	19.2	9.3	0.0	10.0	22.0	
OU2MW-39S	--	--	--	1.8	1.9	14.7	22.0	19.6	24.0	21.0	28.0	31.0	18.2	16.0	37.0	30.0	14.4	18.0	28.0	26.0	
OU2MW-39I	--	--	--	7.2	2.7	17.0	20.0	38.0	32.0	19.0	28.0	49.0	32.0	31.0	41.0	43.0	29.0	10.0	25.0	30.0	
OU2MW-39I2	--	--	--	0.0	0.0	0.0	7.6	0.0	2.8	0.0	0.0	0.0	1.1	0.0	0.0	0.9	0.0	0.0	0.0	2.0	
OU2MW-39D	--	--	--	0.0	0.0	0.0	7.6	0.0	3.0	0.0	0.0	0.0	0.3	0.0	0.0	1.2	0.0	0.0	0.0	0.0	
OU2MW-47S	0.0	0.0	9.9	20.0	22.0	18.4	36.0	28.0	32.0	33.0	31.0	33.0	33.0	30.0	33.0	26.0	26.0	12.0	25.0	33.0	
OU2MW-47I	0.0	0.0	24.0	20.0	26.0	26.0	31.0	36.0	38.0	43.0	28.0	38.0	40.0	39.0	40.0	28.0	26.0	20.0	30.0	24.0	
OU2MW-47I2	0.0	6.8	36.0	20.0	22.0	31.0	32.0	40.0	40.0	46.0	25.0	43.0	35.0	34.0	40.0	30.0	25.0	16.0	29.0	39.0	
OU2MW-47D	0.0	11.2	30.0	20.0	23.0	16.6	32.0	27.0	18.6	26.0	23.0	25.0	16.0	26.0	32.0	25.0	24.0	12.0	27.0	28.0	
OU2MW-19I	--	--	--	--	--	--	--	--	0.0	--	--	0.0	--	0.0	2.7	6.0	4.2	0.0	--	2.7	
OU2MW-19I2	--	--	--	--	--	--	--	--	0.0	--	--	0.1	--	26.0	34.0	2.5	36.0	32.0	--	27.0	
OU2MW-19D	--	--	--	--	--	--	--	--	0.0	--	--	0.0	--	0.0	0.0	2.5	9.2	18.0	--	20.0	
OU2MW-02S	--	--	12.1	--	--	5.8	--	--	--	0.0	--	4.1	--	--	7.2	--	0.0	--	--	--	
OU2MW-02I	--	--	0.0	--	--	5.4	--	--	--	0.0	--	0.7	--	--	0.0	--	1.0	--	--	--	
OU2MW-02I2	--	--	0.0	--	--	5.2	--	--	--	0.0	--	0.0	--	--	0.0	--	0.0	--	--	--	
OU2MW-02D	--	--	0.0	--	--	5.2	--	--	--	0.0	--	0.0	--	--	0.0	--	1.0	--	--	--	

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
 OU-2 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	2009												2010								
	Baseline Jan-09	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	
Temperature (degrees Celsius)																					
OU2MW-30S	--	--	10.9	10.3	11.6	14.9	16.2	18.2	19.9	19.6	17.3	16.9	14.5	12.8	11.5	11.0	12.9	14.5	18.8	20.7	
OU2MW-30I	--	--	12.6	12.1	13.4	15.3	15.5	16.5	18.3	15.6	15.0	15.5	13.0	12.6	12.6	13.3	14.1	14.5	18.1	19.4	
OU2MW-30I2	--	--	13.1	11.7	12.6	16.4	15.4	15.9	18.3	16.1	15.0	15.0	12.6	13.4	13.3	13.2	13.9	14.0	17.9	18.7	
OU2MW-30I3	--	--	12.4	12.1	12.2	15.8	14.4	16.9	17.3	18.1	15.7	14.9	14.5	12.8	12.7	13.2	13.7	14.7	17.1	18.3	
OU2MW-30D	--	--	12.3	11.9	12.5	15.2	16.0	16.0	17.5	15.6	15.4	15.4	13.5	11.8	12.3	13.0	13.2	14.7	17.3	17.8	
OU2MW-30D2	--	--	11.9	11.9	12.8	15.1	14.5	15.5	18.7	15.2	15.2	15.1	13.6	13.0	12.4	12.9	13.6	14.4	17.9	17.8	
OU2MW-39S	--	--	--	9.2	8.9	12.9	13.7	15.8	18.5	17.3	15.8	14.8	13.5	11.7	9.5	9.4	10.8	12.0	16.0	16.9	
OU2MW-39I	--	--	--	12.9	11.6	12.7	13.1	14.3	16.1	15.2	14.3	14.3	14.1	13.9	11.2	12.6	13.1	12.6	14.9	15.4	
OU2MW-39I2	--	--	--	12.0	12.0	13.5	13.9	14.9	15.5	14.8	13.5	14.3	11.2	12.3	10.6	12.7	13.1	14.6	15.4	16.3	
OU2MW-39D	--	--	--	11.9	11.2	13.5	13.2	14.8	16.2	14.6	13.4	13.9	11.8	11.9	10.8	12.1	12.7	14.8	14.9	15.5	
OU2MW-47S	12.6	10.8	10.5	10.9	12.2	14.4	14.1	17.1	19.0	17.6	17.2	16.3	14.6	11.6	11.2	11.3	12.5	14.1	16.6	19.5	
OU2MW-47I	13.8	13.0	12.5	12.3	12.9	13.0	13.6	16.2	17.0	16.0	15.2	15.4	13.5	12.9	12.5	13.7	13.3	13.5	15.3	20.0	
OU2MW-47I2	13.1	12.1	12.6	12.9	14.0	14.1	15.8	16.5	16.8	15.4	14.7	14.3	14.2	12.9	13.6	13.9	13.9	14.6	16.0	19.4	
OU2MW-47D	13.4	12.6	12.0	12.3	14.4	14.0	14.7	16.1	16.7	15.5	14.8	14.1	12.3	12.9	12.5	12.9	13.6	14.2	16.2	17.6	
OU2MW-19I	--	--	--	--	--	--	--	--	19.2	--	--	16.2	--	12.5	12.7	12.2	13.0	13.2	--	16.0	
OU2MW-19I2	--	--	--	--	--	--	--	--	--	15.6	--	15.0	--	13.4	13.2	11.7	14.6	14.3	--	16.7	
OU2MW-19D	--	--	--	--	--	--	--	--	15.7	--	--	14.8	--	12.1	12.5	11.7	14.4	14.3	--	17.3	
OU2MW-02S	--	--	10.9	--	--	18.0	--	--	--	21.6	--	13.3	--	--	5.1	--	15.7	--	--	--	
OU2MW-02I	--	--	11.0	--	--	17.9	--	--	--	20.4	--	14.3	--	--	11.3	--	18.0	--	--	--	
OU2MW-02I2	--	--	10.2	--	--	20.4	--	--	--	17.2	--	14.4	--	--	6.5	--	15.8	--	--	--	
OU2MW-02D	--	--	10.4	--	--	20.0	--	--	--	21.2	--	13.1	--	--	8.6	--	16.3	--	--	--	
Oxidation Reduction Potential																					
OU2MW-30S	--	--	22	38	169	324	224	177	355	196	237	213	198	294	220	195	189	176	186	240	
OU2MW-30I	--	--	-102	-74	41	251	102	105	214	107	223	-18	365	141	190	183	194	170	175	205	
OU2MW-30I2	--	--	-48	-21	160	320	202	197	276	123	222	187	379	312	158	160	184	176	209	239	
OU2MW-30I3	--	--	57	77	188	131	243	161	297	132	6	174	169	324	164	187	180	164	184	237	
OU2MW-30D	--	--	76	85	191	170	348	202	352	210	6	47	209	185	190	223	201	200	224	200	
OU2MW-30D2	--	--	-41	-35	109	147	204	65	82	61	-39	-5	379	114	105	145	104	59	104	101	
OU2MW-39S	--	--	--	147	184	226	331	282	258	198	197	278	420	157	207	226	195	216	157	277	
OU2MW-39I	--	--	--	17	-20	87	325	306	245	198	209	248	405	166	195	175	184	216	140	199	
OU2MW-39I2	--	--	--	128	135	211	170	168	106	208	211	78	288	161	293	210	167	171	181	206	
OU2MW-39D	--	--	--	38	60	129	78	87	-58	120	93	-15	113	76	195	79	61	83	101	60	
OU2MW-47S	-62	-104	21	84	189	206	340	343	314	206	244	58	256	183	209	268	201	251	220	221	
OU2MW-47I	-104	-114	15	44	91	138	330	288	210	171	229	56	356	190	205	229	182	216	195	182	
OU2MW-47I2	75	144	134	116	178	199	225	324	306	184	232	305	360	304	172	226	209	206	209	204	
OU2MW-47D	79	151	161	120	157	128	156	240	167	100	144	167	263	204	120	144	166	170	194	203	
OU2MW-19I	--	--	--	--	--	--	--	--	-71	--	--	-132	--	-95	-109	-39	-61	-103	--	-68	
OU2MW-19I2	--	--	--	--	--	--	--	--	--	70	--	38	--	155	255	14	178	192	--	167	
OU2MW-19D	--	--	--	--	--	--	--	--	-122	--	--	-113	--	-122	155	14	20	42	--	29	
OU2MW-02S	--	--	47	--	--	0	--	--	--	-134	--	33	--	--	91	--	-78	--	--	--	
OU2MW-02I	--	--	-35	--	--	-46	--	--	--	-59	--	-46	--	--	-17	--	-71	--	--	--	
OU2MW-02I2	--	--	-9	--	--	23	--	--	--	32	--	-6	--	--	45	--	40	--	--	--	
OU2MW-02D	--	--	73	--	--	151	--	--	--	74	--	83	--	--	228	--	82	--	--	--	

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Well ID	2010					2011											
	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
pH (SU)																	
OU2MW-30S	5.62	5.65	6.04	4.56	5.21	6.55	5.99	6.39	5.60	5.21	5.60	5.35	5.70	5.54	6.02	5.70	5.49
OU2MW-30I	5.85	5.75	6.17	4.91	5.58	6.40	5.61	5.73	5.55	5.38	5.44	5.33	5.93	5.87	6.27	5.95	5.75
OU2MW-30I2	5.99	5.94	6.20	5.71	5.78	6.71	5.59	5.91	5.44	5.32	5.29	5.17	5.86	5.71	6.12	5.98	5.69
OU2MW-30I3	6.01	5.74	5.90	4.00	5.48	6.75	5.89	6.40	5.53	6.19	5.27	5.95	5.45	5.85	2.85	5.86	4.91
OU2MW-30D	5.66	5.60	5.87	5.44	5.60	6.46	5.66	5.54	5.16	5.52	5.06	5.85	5.43	5.67	5.49	5.64	4.60
OU2MW-30D2	5.92	5.63	5.99	5.43	6.27	6.78	5.95	5.94	5.49	5.71	5.50	5.92	5.32	5.50	5.09	5.00	4.78
OU2MW-39S	6.13	5.96	5.68	5.29	5.53	5.75	4.43	5.41	5.38	5.00	5.80	6.05	5.60	5.43	5.48	5.94	5.80
OU2MW-39I	6.55	6.30	6.19	5.89	6.05	6.16	6.68	ER	6.14	5.80	6.36	6.60	6.48	5.50	6.22	6.26	6.29
OU2MW-39I2	5.13	4.93	4.92	5.26	4.91	5.09	3.68	4.54	4.57	4.21	4.74	4.87	4.64	4.91	4.93	6.20	4.64
OU2MW-39D	5.26	5.03	4.95	5.41	6.06	5.41	5.93	5.84	4.92	4.56	5.16	5.22	4.86	4.75	4.69	4.76	4.53
OU2MW-47S	5.37	5.98	5.82	5.11	--	5.66	5.60	6.01	5.14	5.80	5.32	5.40	5.71	5.37	6.29	5.59	5.62
OU2MW-47I	6.49	6.16	5.91	5.21	--	5.90	5.75	6.39	5.85	6.53	6.03	6.18	6.49	5.97	6.93	5.99	6.50
OU2MW-47I2	6.21	6.11	6.12	5.57	--	6.75	6.08	6.61	5.62	6.43	5.80	6.04	6.47	5.90	6.83	5.82	6.36
OU2MW-47D	5.77	5.41	5.48	5.42	--	5.83	5.60	6.20	5.32	6.15	5.83	5.92	6.20	5.65	6.32	5.58	5.87
OU2MW-19I	--	--	--	--	7.32	--	6.25	--	6.60	--	--	--	6.27	--	--	--	5.96
OU2MW-19I2	--	--	--	--	5.44	--	4.65	--	5.99	--	--	--	6.31	--	--	--	6.23
OU2MW-19D	--	--	--	--	5.35	--	5.86	--	5.73	--	--	--	5.39	--	--	--	5.26
OU2MW-02S	--	5.64	4.85	--	--	--	6.70	--	5.57	--	--	--	--	5.28	--	--	5.88
OU2MW-02I	--	5.79	5.89	--	--	--	6.25	--	6.19	--	--	--	--	7.00	--	6.12	--
OU2MW-02I2	--	5.83	5.03	--	--	--	5.85	--	5.87	--	--	--	--	6.55	--	5.34	--
OU2MW-02D	--	5.17	4.68	--	--	--	3.12	--	5.34	--	--	--	--	4.84	--	5.60	--
Conductivity (mS/cm)																	
OU2MW-30S	0.214	0.247	0.312	0.435	0.198	0.431	0.431	0.442	0.545	0.587	0.418	0.386	0.369	0.430	0.467	0.582	0.558
OU2MW-30I	0.351	0.374	0.406	0.488	0.343	0.323	0.340	0.512	0.419	0.686	0.584	0.628	0.635	0.695	0.664	0.665	0.580
OU2MW-30I2	0.301	0.323	0.316	0.252	0.285	0.279	0.318	0.491	0.586	0.554	0.465	0.538	0.602	0.623	0.640	0.612	0.552
OU2MW-30I3	0.403	0.383	0.423	0.567	0.231	0.411	0.411	0.392	0.485	0.390	0.330	0.362	0.297	0.302	0.325	0.429	0.990
OU2MW-30D	0.286	0.342	0.339	0.313	0.370	0.368	0.323	0.471	0.354	0.468	0.252	0.260	0.265	0.260	0.270	0.334	0.347
OU2MW-30D2	0.376	0.369	0.393	0.353	0.197	0.323	0.319	0.472	0.385	0.470	0.318	0.320	0.291	0.280	0.009	0.333	0.352
OU2MW-39S	0.238	0.227	0.184	0.243	0.509	0.610	0.410	0.529	0.202	0.271	0.287	0.392	0.305	0.385	0.475	0.322	0.439
OU2MW-39I	0.811	0.861	0.570	0.490	0.595	0.612	0.584	0.493	0.379	0.570	0.520	0.536	0.788	0.643	0.842	0.714	0.808
OU2MW-39I2	0.312	0.223	0.193	0.183	0.152	0.198	0.272	0.615	0.271	0.449	0.343	0.360	0.387	0.410	0.461	0.307	0.383
OU2MW-39D	0.866	0.764	0.612	0.478	0.186	0.196	0.400	0.369	0.286	0.267	0.180	0.223	0.231	0.242	0.263	0.217	0.228
OU2MW-47S	0.364	0.444	0.376	0.434	--	0.338	0.393	0.252	0.292	0.222	0.271	0.730	0.361	0.556	0.374	0.405	0.310
OU2MW-47I	0.674	0.586	0.450	0.523	--	0.768	0.747	0.662	0.870	0.686	0.605	1.306	0.699	0.899	0.741	0.908	0.940
OU2MW-47I2	0.383	0.328	0.318	0.361	--	0.367	0.425	0.419	0.784	0.662	0.775	1.130	0.956	1.230	0.826	0.905	0.930
OU2MW-47D	0.312	0.264	0.247	0.341	--	0.664	0.660	0.472	0.661	0.565	0.414	0.411	0.366	0.752	0.899	1.240	1.210
OU2MW-19I	--	--	--	--	0.340	--	0.571	--	0.755	--	--	--	0.675	--	--	--	0.804
OU2MW-19I2	--	--	--	--	0.241	--	0.443	--	0.357	--	--	--	1.130	--	--	--	0.684
OU2MW-19D	--	--	--	--	0.764	--	0.574	--	0.342	--	--	--	0.435	--	--	--	0.413
OU2MW-02S	--	0.439	0.519	--	--	--	0.537	--	0.381	--	--	--	--	0.658	--	0.688	--
OU2MW-02I	--	0.218	0.279	--	--	--	0.271	--	0.166	--	--	--	--	0.310	--	0.412	--
OU2MW-02I2	--	0.065	0.070	--	--	--	0.084	--	0.056	--	--	--	--	0.177	--	0.095	--
OU2MW-02D	--	0.039	0.045	--	--	--	0.053	--	0.036	--	--	--	--	0.051	--	0.056	--
Dissolved Oxygen (mg/L)																	
OU2MW-30S	29.0	27.0	26.0	24.0	24.0	23.0	23.0	22.0	30.0	28.0	26.0	27.0	31.0	23.0	28.0	18.0	22.0
OU2MW-30I	25.0	36.0	40.0	24.0	30.0	24.0	31.0	21.0	41.2	34.1	29.0	35.0	37.0	33.0	34.0	23.0	26.0
OU2MW-30I2	24.0	42.0	20.0	23.0	28.0	25.0	28.0	24.0	29.0	32.0	31.0	31.0	40.0	32.0	42.0	26.0	28.0
OU2MW-30I3	36.0	34.0	39.0	23.0	27.0	20.0	33.0	26.0	29.0	28.0	29.0	30.0	32.0	29.0	20.0	29.0	38.0
OU2MW-30D	20.0	33.0	18.0	46.0	30.0	27.0	29.0	29.0	37.0	35.0	32.0	32.0	40.0	30.0	39.0	30.0	31.0
OU2MW-30D2	30.0	23.0	27.0	22.0	23.0	6.0	5.0	1.0	20.0	4.0	18.0	19.0	39.0	15.0	15.0	13.0	26.0
OU2MW-39S	27.0	20.0	24.0	19.0	15.0	16.0	19.6	19.0	17.0	32.0	30.0	20.0	23.0	20.0	23.0	20.0	13.0
OU2MW-39I	38.0	29.0	27.0	21.0	12.0	25.0	24.0	12.0	30.0	29.0	28.0	32.0	27.0	26.0	33.0	42.0	30.0
OU2MW-39I2	0.9	0.0	0.0	1.0	0.0	1.0	0.0	1.0	2.0	1.0	1.0	2.0	2.0	3.0	2.0	1.0	2.0
OU2MW-39D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	1.0
OU2MW-47S	29.0	25.0	26.0	38.0	--	20.0	21.0	22.0	26.0	24.0	26.0	29.0	22.0	38.0	24.0	22.0	21.0
OU2MW-47I	26.0	27.0	24.0	25.0	--	21.0	22.0	22.0	40.0	21.0	23.0	31.0	25.0	38.0	25.0	27.0	22.0
OU2MW-47I2	36.0	21.0	25.0	28.0	--	18.0	26.0	21.0	33.0	25.0	25.0	27.0	24.0	41.0	27.0	26.0	20.0
OU2MW-47D	26.0	21.0	24.0	28.0	--	29.0	26.0	25.0	27.0	27.0	28.0	29.0	33.0	31.0	27.0	36.0	20.0
OU2MW-19I	--	--	--	--	10.0	--	13.2	--	21.0	--	--	--	29.0	--	--	--	26.0
OU2MW-19I2	--	--	--	--	26.0	--	22.0	--	27.0	--	--	--	33.0	--	--	--	35.0
OU2MW-19D	--	--	--	--	20.0	--	2.0	--	1.7	--	--	--	10.3	--	--	--	17.0
OU2MW-02S	--	14.5	12.6	--	--	--	9.2	--	28.0	--	--	--	--	30.0	--	10.9	--
OU2MW-02I	--	0.0	0.0	--	--	--	9.1	--	3.3	--	--	--	--	0.0	--	4.5	--
OU2MW-02I2	--	0.1	0.0	--	--	--	0.7	--	0.5	--	--	--	--	0.0	--	2.1	--
OU2MW-02D	--	0.2	0.0	--	--	--	1.0	--	0.5	--	--	--	--	2.1	--	3.0	--

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
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 Bay Shore/Brightwaters Former MGP Site

Well ID	2010					2011											
	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
Temperature (degrees Celcius)																	
OU2MW-30S	20.8	20.5	19.8	17.3	13.5	10.8	11.7	10.9	19.7	14.9	18.6	19.6	20.3	19.5	17.8	17.0	15.8
OU2MW-30I	16.5	16.8	16.7	15.4	13.4	9.0	11.6	13.6	15.7	15.2	16.1	17.8	17.2	15.8	14.6	15.0	14.2
OU2MW-30I2	15.8	17.9	16.3	15.6	12.6	9.4	12.7	12.9	15.5	15.8	16.4	17.5	17.0	15.9	14.1	14.7	13.7
OU2MW-30I3	19.1	17.0	16.2	15.0	12.7	8.0	11.6	12.5	14.0	15.2	16.0	15.1	16.3	15.8	14.2	16.2	13.6
OU2MW-30D	16.5	17.1	16.0	15.2	12.6	8.8	10.9	13.4	14.5	15.6	16.2	15.4	17.5	10.3	14.5	14.3	12.8
OU2MW-30D2	18.7	17.0	16.5	15.3	13.2	11.9	11.6	13.7	15.5	15.6	16.0	14.7	16.0	15.7	13.3	14.8	13.2
OU2MW-39S	18.9	16.9	16.6	16.0	11.9	10.3	11.6	9.9	10.7	13.8	14.5	17.0	16.7	18.0	16.5	15.7	13.6
OU2MW-39I	16.9	14.7	15.3	15.4	12.5	11.8	13.0	12.6	13.2	14.7	14.2	15.5	15.4	15.2	14.9	14.9	14.0
OU2MW-39I2	17.9	15.3	14.3	14.2	12.1	12.1	12.6	12.4	13.8	15.1	13.7	15.3	14.6	14.7	13.8	13.6	13.3
OU2MW-39D	18.2	15.3	13.8	14.0	11.8	11.9	12.1	12.0	12.8	14.0	13.7	16.7	14.2	14.6	14.2	13.7	13.0
OU2MW-47S	19.3	17.8	16.8	16.3	--	9.6	11.0	10.8	12.6	13.1	15.2	17.0	19.1	17.8	17.3	15.9	14.7
OU2MW-47I	16.5	15.0	15.6	15.0	--	12.1	11.7	12.5	16.7	13.8	13.9	14.5	16.6	15.6	15.1	14.9	14.2
OU2MW-47I2	18.1	15.9	14.8	14.7	--	11.6	12.5	12.8	14.1	14.7	15.2	17.0	17.1	15.1	14.5	14.2	13.6
OU2MW-47D	16.2	16.3	15.6	14.5	--	11.7	12.2	12.5	16.3	14.6	14.8	16.4	17.2	15.1	14.5	14.3	13.6
OU2MW-19I	--	--	--	--	15.4	--	11.7	--	12.1	--	--	--	16.2	--	--	--	15.5
OU2MW-19I2	--	--	--	--	13.9	--	11.5	--	13.2	--	--	--	16.1	--	--	--	14.3
OU2MW-19D	--	--	--	--	14.0	--	11.8	--	12.9	--	--	--	15.7	--	--	--	13.7
OU2MW-02S	--	28.2	17.7	--	--	--	10.1	--	12.2	--	--	--	--	17.5	--	15.0	--
OU2MW-02I	--	23.0	14.6	--	--	--	13.4	--	12.7	--	--	--	--	17.5	--	13.8	--
OU2MW-02I2	--	24.6	17.5	--	--	--	11.9	--	12.5	--	--	--	--	16.9	--	13.8	--
OU2MW-02D	--	24.3	17.7	--	--	--	11.3	--	13.6	--	--	--	--	17.2	--	13.5	--
Oxidation Reduction Potential																	
OU2MW-30S	209	275	161	196	192	217	224	187	219	158	178	184	189	176	209	260	269
OU2MW-30I	180	249	138	173	236	213	235	206	246	168	194	168	174	160	186	260	247
OU2MW-30I2	183	228	172	240	230	208	246	194	296	166	208	201	187	173	202	266	245
OU2MW-30I3	178	271	172	224	178	208	217	182	229	230	216	184	136	193	193	268	252
OU2MW-30D	206	272	189	246	251	200	236	212	260	206	213	200	143	194	208	280	260
OU2MW-30D2	125	216	54	165	131	175	174	161	180	153	172	180	123	202	178	261	245
OU2MW-39S	202	186	228	236	139	177	225	157	257	197	171	170	140	130	149	140	180
OU2MW-39I	170	158	210	200	87	164	191	105	135	155	133	120	130	140	129	203	175
OU2MW-39I2	197	177	182	194	179	211	246	175	203	182	130	199	166	140	100	117	135
OU2MW-39D	83	99	107	72	100	100	76	30	129	94	50	54	54	86	73	86	108
OU2MW-47S	294	149	284	242	--	266	273	216	284	196	193	215	205	137	213	244	188
OU2MW-47I	233	172	307	230	--	424	261	205	236	171	164	160	183	114	205	222	176
OU2MW-47I2	254	290	295	210	--	223	239	195	256	188	164	220	206	73	218	256	187
OU2MW-47D	166	187	195	200	--	379	262	189	240	183	152	208	188	153	217	241	179
OU2MW-19I	--	--	--	--	-2	--	73	--	95	--	--	--	106	--	--	--	263
OU2MW-19I2	--	--	--	--	236	--	184	--	271	--	--	--	123	--	--	--	279
OU2MW-19D	--	--	--	--	86	--	40	--	114	--	--	--	110	--	--	--	223
OU2MW-02S	--	93	171	--	--	--	163	--	206	--	--	--	--	211	--	169	--
OU2MW-02I	--	-38	-17	--	--	--	-87	--	-55	--	--	--	--	-76	--	-32	--
OU2MW-02I2	--	6	59	--	--	--	-17	--	16	--	--	--	--	-10	--	13	--
OU2MW-02D	--	116	138	--	--	--	54	--	84	--	--	--	--	80	--	114	--

Appendix E - Table E-2
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Well ID	2012												2013							
	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13
pH (SU)																				
OU2MW-30S	5.35	--	5.39	6.20	6.07	7.80	6.1	6.24	6.28	6.16	6.04	6.00	6.00	5.89	5.95	6.19	6.26	5.90	6.14	6.01
OU2MW-30I	5.60	--	5.65	6.28	6.25	5.77	6.43	6.41	6.44	6.30	6.25	6.06	5.92	5.95	6.02	5.47	6.22	6.09	6.23	6.30
OU2MW-30I2	5.65	--	5.55	6.58	6.28	5.59	6.3	6.37	6.48	6.39	6.41	6.21	6.11	5.73	6.07	6.38	6.33	6.01	6.20	6.09
OU2MW-30I3	5.31	--	5.22	6.11	5.92	7.20	5.94	5.44	6.06	5.96	5.84	5.78	5.83	5.63	5.55	5.89	5.75	5.49	5.70	5.55
OU2MW-30D	5.23	--	5.20	6.20	5.94	5.05	5.87	5.58	5.75	5.85	5.74	5.72	5.71	5.65	5.51	5.87	5.70	5.41	5.55	5.74
OU2MW-30D2	5.24	--	5.02	5.82	5.84	7.71	5.82	5.72	5.83	5.89	5.77	6.19	5.65	5.44	5.36	5.68	5.56	5.50	5.59	5.59
OU2MW-39S	6.23	5.40	5.99	5.71	5.90	6.23	5.94	6.23	6.13	6.14	6.01	6.09	5.55	5.63	5.93	5.93	5.81	5.68	6.04	5.83
OU2MW-39I	6.98	4.52	6.68	6.89	6.79	6.80	6.76	6.85	6.81	6.84	6.89	6.79	6.56	6.48	6.69	6.51	6.75	6.76	6.88	6.66
OU2MW-39I2	4.71	--	4.36	4.90	5.06	5.04	5.00	4.93	5.26	5.48	5.30	5.51	5.48	5.87	6.35	6.07	5.85	6.12	6.34	6.31
OU2MW-39D	4.66	4.46	4.52	5.71	5.04	5.52	5.84	4.98	5.32	5.39	5.01	5.09	4.90	4.80	5.38	4.67	4.97	5.05	5.11	5.14
OU2MW-47S	5.50	5.10	5.55	5.9	5.74	5.75	5.72	5.84	--	5.58	5.64	5.44	5.63	4.05	5.98	5.65	5.64	5.78	5.83	5.72
OU2MW-47I	6.21	5.52	5.45	6.27	6.20	5.90	5.97	6.23	--	5.97	6.03	6.09	6.27	4.91	5.70	--	6.16	6.17	6.13	6.06
OU2MW-47I2	6.14	5.70	6.17	6.51	6.28	6.17	6.11	6.37	--	6.13	6.36	6.35	6.40	4.97	5.81	--	6.20	6.14	6.29	6.32
OU2MW-47D	5.85	5.40	5.39	6.08	6.00	6.24	5.65	6.27	--	5.98	6.06	6.17	6.17	4.71	--	--	6.09	--	6.10	6.22
OU2MW-19I	--	--	6.44	--	--	6.54	--	6.49	--	--	6.66	--	5.79	--	--	6.57	--	--	6.41	--
OU2MW-19I2	--	--	5.95	--	--	6.69	--	6.77	--	--	6.55	--	6.30	--	--	6.11	--	--	6.15	--
OU2MW-19D	--	--	5.13	--	--	5.70	--	5.69	--	--	5.58	--	5.80	--	--	5.64	--	--	5.57	--
OU2MW-02S	--	--	--	--	5.77	--	--	--	--	5.67	--	5.69	--	--	5.70	--	--	5.81	--	--
OU2MW-02I	--	6.71	--	--	7.50	--	--	--	6.46	--	6.32	--	--	5.76	--	--	6.07	--	--	--
OU2MW-02I2	--	6.18	--	--	6.83	--	--	--	6.25	--	6.03	--	--	5.79	--	--	5.80	--	--	--
OU2MW-02D	--	5.54	--	--	6.04	--	--	--	5.71	--	5.60	--	--	4.94	--	--	5.32	--	--	--
Conductivity (mS/cm)																				
OU2MW-30S	0.324	--	0.581	0.469	0.405	0.486	0.476	0.399	0.383	0.410	0.293	0.429	0.410	0.464	0.852	0.661	0.541	0.484	0.383	0.352
OU2MW-30I	0.487	--	0.610	0.555	0.636	0.91	0.779	0.628	0.745	0.859	0.591	0.899	0.990	0.880	0.908	0.354	0.597	0.591	0.517	0.720
OU2MW-30I2	0.442	--	0.519	0.355	0.424	0.559	0.688	0.616	0.646	0.732	0.597	0.865	0.916	0.584	1.090	0.700	0.648	0.597	0.519	0.579
OU2MW-30I3	0.385	--	0.496	0.321	0.396	0.496	0.381	0.358	0.395	0.462	0.299	0.417	0.478	0.481	0.708	0.480	0.463	0.405	0.390	0.400
OU2MW-30D	0.279	--	0.366	0.251	0.291	0.416	0.349	0.350	0.394	0.462	0.310	0.467	0.486	0.521	0.684	0.435	0.429	0.438	0.336	0.408
OU2MW-30D2	0.300	--	0.373	0.272	0.341	0.463	0.312	0.235	0.243	0.282	0.202	0.375	0.451	0.635	0.934	0.677	0.721	0.813	0.706	0.840
OU2MW-39S	0.266	0.260	0.231	0.414	0.400	0.260	0.505	0.281	0.276	0.258	0.266	0.269	0.202	0.260	0.376	0.265	0.267	0.307	0.250	0.268
OU2MW-39I	0.552	0.302	0.630	0.974	0.978	0.663	0.900	0.643	0.685	0.651	0.617	0.631	0.566	0.682	1.030	0.767	0.728	0.718	0.673	0.749
OU2MW-39I2	0.352	--	0.424	0.376	0.38	0.392	0.408	0.378	0.460	0.439	0.462	0.478	0.454	0.505	0.418	0.471	0.441	0.468	0.459	0.483
OU2MW-39D	0.211	0.213	0.221	0.184	0.28	0.203	0.500	0.177	0.213	0.201	0.192	0.188	0.180	0.207	0.193	0.223	0.191	0.208	0.199	0.212
OU2MW-47S	0.353	0.347	0.370	0.358	0.362	0.348	0.304	0.361	--	0.372	0.457	0.522	0.433	1.090	0.417	0.374	0.344	0.377	0.306	0.354
OU2MW-47I	0.599	0.675	0.657	0.431	0.411	0.676	0.616	0.696	--	0.464	0.589	0.627	0.531	1.160	0.524	--	0.500	0.533	0.509	0.471
OU2MW-47I2	0.513	0.537	0.540	0.478	0.607	0.988	0.810	0.841	--	0.550	0.537	0.492	0.394	0.879	0.300	--	0.339	0.358	0.341	0.355
OU2MW-47D	0.729	0.62	0.639	0.523	0.624	0.400	0.352	0.377	--	0.488	0.567	0.865	0.649	1.430	--	--	0.552	--	0.462	0.444
OU2MW-19I	--	--	0.900	--	--	0.807	--	0.910	--	--	0.736	--	0.377	--	--	0.554	--	--	0.843	--
OU2MW-19I2	--	--	0.729	--	--	0.590	--	0.511	--	--	0.470	--	0.384	--	--	0.426	--	--	0.523	--
OU2MW-19D	--	--	0.568	--	--	0.620	--	0.555	--	--	0.606	--	0.214	--	--	0.541	--	--	0.478	--
OU2MW-02S	--	--	--	--	0.747	--	--	--	0.559	--	0.580	--	--	0.443	--	--	0.504	--	--	--
OU2MW-02I	--	0.462	--	--	0.430	--	--	--	0.492	--	0.581	--	--	0.735	--	--	0.731	--	--	--
OU2MW-02I2	--	0.095	--	--	0.118	--	--	--	0.109	--	0.136	--	--	0.133	--	--	0.162	--	--	--
OU2MW-02D	--	0.052	--	--	0.054	--	--	--	0.046	--	0.048	--	--	0.051	--	--	0.056	--	--	--
Dissolved Oxygen (mg/L)																				
OU2MW-30S	24.0	--	31.0	27.0	29.0	30.0	26.0	26.0	31.0	28.0	26.0	23.0	36.0	24.0	32.0	23.0	35.0	25.0	31.0	22.0
OU2MW-30I	37.0	--	40.0	33.0	38.0	34.0	29.0	32.0	37.0	25.0	22.0	23.0	41.0	28.0	35.0	36.0	28.0	39.0	43.0	27.0
OU2MW-30I2	37.0	--	36.0	20.0	21.0	21.0	36.0	35.0	32.0	61.0	38.0	19.0	47.0	23.0	35.0	35.0	41.0	41.0	47.0	27.0
OU2MW-30I3	36.0	--	34.0	20.0	39.0	37.0	31.0	31.0	26.0	25.0	29.0	21.0	47.0	28.0	31.0	30.0	35.0	36.0	46.0	28.0
OU2MW-30D	41.0	--	39.0	24.0	24.0	29.0	29.0	36.0	40.0	62.0	20.0	20.0	52.0	29.0	21.0	35.0	37.0	32.0	47.0	29.0
OU2MW-30D2	30.0	--	14.0	18.9	19.0	21.0	7.0	0.0	9.0	4.4	11.0	17.0	28.0	22.0	26.0	25.0	27.0	29.0	28.0	7.0
OU2MW-39S	21.0	22.0	22.0	20.0	29.0	20.0	14.0	19.0	26.0	23.0	20.0	29.0	20.0	18.0	21.0	28.0	27.0	26.0	27.0	29.0
OU2MW-39I	26.0	2.0	34.0	16.0	25.0	24.0	27.0	18.0	32.0	28.0	32.0	37.0	39.0	38.0	34.0	42.0	38.0	32.0	27.0	24.0
OU2MW-39I2	1.0	--	2.0	1.0	2.0	1.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0	15.0	2.0	0.0	1.0	1.0	0.0	4.9
OU2MW-39D	1.0	1.0	1.0	0.0	2.0	1.0	8.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	3.4
OU2MW-47S	24.0	20.0	30.0	24.0	26.0	21.0	20.0	31.0	--	25.0	24.0	28.0	28.0	22.0	41.0	39.0	29.0	39.0	35.0	22.0
OU2MW-47I	22.0	30.0	32.0	24.0	27.0	25.0	44.0	16.0	--	24.0	36.0	26.0	43.0	24.0	48.0	--	42.0	42.0	43.0	36.0
OU2MW-47I2	25.0	42.0	34.0	41.0	24.0	36.0	15.0	15.0	--	31.0	30.0	35.0	42.0	27.0	49.0	--	44.0	42.0	47.0	27.0
OU2MW-47D	22.0	33.0	33.0	25.0	28.0	36.0	24.0	37.0	--	22.0	29.0	45.0	41.0	17.0	--	--	32.0	--	41.0	21.0
OU2MW-19I	--	--	24.0	--	--	32.0	--	34.0	--	--	0.0	--	40.0	--	--	21.0	--	--	14.0	--
OU2MW-19I2	--	--	36.0	--	--	29.0	--	23.8	--	--	0.0	--	1.7	--	--	25.0	--	--	21.0	--
OU2MW-19D	--	--	15.8	--	--	11.9	--	11.3	--	--	5.1	--	0.4	--	--	4.7	--	--	4.4	--
OU2MW-02S	--	--	--	--	20.0	--	--	--	--	13.0	--	14.8	--	--	20.0	--	--	22.0	--	--
OU2MW-02I	--	1.6	--	--	0.0	--	--	--	--	0.0	--	3.6	--	--	14.2	--	--	12.0	--	--
OU2MW-02I2	--	0.0	--	--	0.0	--	--	--	--	1.1	--	3.9	--	--	0.7	--	--	0.7	--	--
OU2MW-02D	--	2.0	--	--	0.0	--	--	--	--	2.2	--	0.4	--	--	0.7	--	--	0.5	--	--

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
 OU-2 Oxygen Injection System
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Well ID	2012												2013							
	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13
Temperature (degrees Celcius)																				
OU2MW-30S	13.6	--	14.4	13.9	17.7	20.3	22.2	22.9	21.0	19.7	18.7	11.8	12.6	12.0	11.5	12.0	14.2	19.2	20.9	19.6
OU2MW-30I	13.9	--	15.2	14.4	16.6	16.6	19.2	20.4	19.0	15.8	16.8	12.5	13.4	14.0	13.4	13.9	14.6	17.2	22.4	16.7
OU2MW-30I2	13.8	--	15.1	15.2	17.7	17.0	19.6	19.9	18.3	15.4	16.8	12.6	13.1	12.5	14.0	12.8	14.4	17.2	20.4	19.2
OU2MW-30I3	13.2	--	14.5	15.1	18.4	18.3	21.5	18.2	17.8	15.8	16.0	12.5	12.8	13.1	13.4	13.3	14.9	17.5	18.5	17.5
OU2MW-30D	12.6	--	14.7	15.0	18.2	16.9	21.5	17.0	17.0	15.7	16.0	11.9	12.4	12.9	13.1	13.0	14.2	17.9	25.8	16.5
OU2MW-30D2	13.0	--	14.5	15.5	17.9	17.3	19.8	16.9	18.3	14.8	16.6	12.1	12.9	13.7	13.2	13.4	14.5	16.8	23.7	16.3
OU2MW-39S	12.6	10.5	11.9	12.4	13.6	15.6	22.3	19.0	17.3	16.8	14.1	12.1	11.2	9.8	9.4	11.7	11.5	15.2	17.4	16.8
OU2MW-39I	14.0	12.1	13.7	14.3	14.4	15.1	21.0	16.6	15.3	14.8	13.9	12.6	13.3	12.7	12.0	13.0	13.0	15.5	17.0	15.5
OU2MW-39I2	12.6	--	13.4	12.7	13.9	15.1	23.6	17.2	14.3	14.0	12.2	12.4	12.3	12.4	12.0	13.6	13.2	14.6	17.2	15.7
OU2MW-39D	12.2	11.9	12.9	13.0	14.5	15.1	21.9	15.9	14.6	13.6	11.8	11.7	11.9	11.5	11.9	12.9	14.7	15.5	15.6	16.8
OU2MW-47S	13.0	12.3	12.6	16.1	17	18.8	19.0	19.1	--	18.4	16.0	13.3	12.8	12.2	12.0	13.5	15.3	16.9	22.4	17.2
OU2MW-47I	13.5	13.7	12.8	15.9	16.9	19.7	17.3	12.6	--	16.4	14.8	13.9	13.9	13.8	13.9	--	15.2	15.3	18.4	15.7
OU2MW-47I2	13.3	13.4	14.0	16.3	17	18.9	17.8	16.8	--	16.4	14.5	13.6	13.0	13.5	13.7	--	14.9	17.2	20.0	15.6
OU2MW-47D	13.4	12.6	13.4	16.2	17.1	17.5	17.7	17.3	--	16.0	13.9	13.7	12.8	13.1	--	--	14.8	--	18.8	16.0
OU2MW-19I	--	--	12.4	--	--	16.3	--	18.2	--	--	16.1	--	13.0	--	--	13.2	--	--	17.2	--
OU2MW-19I2	--	--	12.2	--	--	17.8	--	17.4	--	--	14.2	--	13.9	--	--	14.2	--	--	16.9	--
OU2MW-19D	--	--	12.4	--	--	16.0	--	18.4	--	--	14.9	--	13.7	--	--	13.9	--	--	16.1	--
OU2MW-02S	--	--	--	--	18.7	--	--	--	22.7	--	15.2	--	--	12.5	--	--	16.6	--	--	--
OU2MW-02I	--	10.2	--	--	17.9	--	--	--	20.9	--	12.8	--	--	11.0	--	--	16.6	--	--	--
OU2MW-02I2	--	9.1	--	--	18.6	--	--	--	20.6	--	13.7	--	--	10.5	--	--	15.6	--	--	--
OU2MW-02D	--	9.6	--	--	17.6	--	--	--	21.1	--	13.8	--	--	10.0	--	--	15.5	--	--	--
Oxidation Reduction Potential																				
OU2MW-30S	220	--	285	224	229	265	210	236	290	203	224	221	277	309	236	251	239	185	141	139
OU2MW-30I	2	--	261	208	233	261	218	220	285	199	221	245	272	304	228	271	197	168	130	229
OU2MW-30I2	155	--	275	196	211	261	229	221	284	194	121	239	264	177	225	238	183	164	124	99
OU2MW-30I3	218	--	309	226	228	281	235	252	239	233	245	255	290	303	263	252	205	213	168	190
OU2MW-30D	203	--	325	208	222	265	224	266	242	231	248	270	269	304	252	246	174	196	208	270
OU2MW-30D2	215	--	301	217	223	256	216	145	216	216	215	224	284	322	271	269	210	216	204	249
OU2MW-39S	177	187	160	205	230	179	281	258	172	215	219	197	185	212	172	152	190	167	219	123
OU2MW-39I	164	182	120	170	196	159	192	222	155	156	197	181	139	180	155	121	152	114	166	54
OU2MW-39I2	145	--	157	180	186	146	174	125	104	93	60	34	56	68	1	28	-24	16	-20	
OU2MW-39D	111	103	113	103	105	78	92	54	92	65	105	90	142	120	87	82	83	77	129	91
OU2MW-47S	261	266	203	243	239	223	202	257	--	228	266	425	281	300	263	230	245	184	135	192
OU2MW-47I	231	238	333	237	257	239	192	228	--	229	231	397	258	289	214	--	213	167	133	161
OU2MW-47I2	241	235	168	171	224	232	187	226	--	207	229	388	246	296	226	--	172	170	159	227
OU2MW-47D	240	248	347	252	289	211	202	248	--	228	230	391	254	307	--	--	158	--	131	218
OU2MW-19I	--	--	233	--	--	197	--	263	--	--	200	--	248	--	--	156	--	--	199	--
OU2MW-19I2	--	--	289	--	--	169	--	241	--	--	184	--	141	--	--	221	--	--	189	--
OU2MW-19D	--	--	269	--	--	157	--	140	--	--	170	--	204	--	--	108	--	--	133	--
OU2MW-02S	--	--	--	--	191	--	--	--	224	--	255	--	--	210	--	--	168	--	--	--
OU2MW-02I	--	-74	--	--	-102	--	--	--	-72	--	-60	--	--	12	--	--	15	--	--	--
OU2MW-02I2	--	9	--	--	-20	--	--	--	-50	--	-31	--	--	-20	--	--	-21	--	--	--
OU2MW-02D	--	78	--	--	78	--	--	--	50	--	105	--	--	133	--	--	108	--	--	--

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Well ID	2013				2014		
	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14
pH (SU)							
OU2MW-30S	5.97	5.87	5.80	5.58	5.72	5.93	5.90
OU2MW-30I	6.02	5.95	5.88	5.76	5.98	6.14	6.02
OU2MW-30I2	6.04	6.03	5.91	5.60	5.80	5.81	6.00
OU2MW-30I3	5.61	5.51	5.38	5.11	5.24	5.40	5.42
OU2MW-30D	5.63	5.59	5.48	5.22	5.34	5.42	5.45
OU2MW-30D2	5.70	5.94	5.29	4.70	4.91	5.16	5.12
OU2MW-39S	6.12	6.01	5.40	5.75	5.76	5.65	5.85
OU2MW-39I	6.86	6.77	6.31	6.51	6.49	6.58	6.64
OU2MW-39I2	5.98	6.36	6.07	6.21	6.08	5.57	6.34
OU2MW-39D	4.92	5.14	4.70	4.85	4.62	4.31	5.41
OU2MW-47S	5.68	5.68	5.50	5.82	5.48	5.63	5.43
OU2MW-47I	5.99	6.03	5.76	6.16	5.77	5.88	5.52
OU2MW-47I2	6.12	6.11	5.90	6.02	5.63	5.95	5.53
OU2MW-47D	6.04	6.03	5.89	6.17	6.05	6.07	5.75
OU2MW-19I	--	6.30	--	--	6.13	--	--
OU2MW-19I2	--	6.46	--	--	6.09	--	--
OU2MW-19D	--	5.41	--	--	5.01	--	--
OU2MW-02S	6.08	--	5.68	--	--	7.22	--
OU2MW-02I	5.86	--	5.55	--	--	6.16	--
OU2MW-02I2	5.79	--	5.37	--	--	7.14	--
OU2MW-02D	5.41	--	4.85	--	--	4.68	--
Conductivity (mS/cm)							
OU2MW-30S	0.418	0.455	0.570	0.718	0.520	0.495	0.507
OU2MW-30I	0.839	0.944	1.090	0.821	0.546	0.521	0.186
OU2MW-30I2	0.624	0.688	0.879	0.856	0.570	0.564	0.499
OU2MW-30I3	0.420	0.482	0.623	0.602	0.398	0.383	0.328
OU2MW-30D	0.421	0.456	0.590	0.610	0.411	0.426	0.364
OU2MW-30D2	0.883	0.984	1.410	1.430	1.080	1.090	1.080
OU2MW-39S	0.294	0.327	0.530	0.599	0.409	0.318	0.279
OU2MW-39I	0.785	0.785	1.210	1.200	0.866	0.734	0.696
OU2MW-39I2	0.533	0.590	0.811	0.781	0.473	0.521	0.556
OU2MW-39D	0.223	0.233	0.362	0.355	0.240	0.209	0.215
OU2MW-47S	0.447	0.475	0.508	0.452	0.446	0.499	0.360
OU2MW-47I	0.437	0.431	0.447	0.474	0.554	0.685	0.523
OU2MW-47I2	0.387	0.413	0.451	0.446	0.492	0.559	0.439
OU2MW-47D	0.416	0.404	0.360	0.287	0.253	0.279	0.202
OU2MW-19I	--	0.974	--	--	0.841	--	--
OU2MW-19I2	--	0.963	--	--	0.569	--	--
OU2MW-19D	--	0.473	--	--	0.576	--	--
OU2MW-02S	0.613	--	0.829	--	--	0.609	--
OU2MW-02I	0.862	--	1.250	--	--	0.795	--
OU2MW-02I2	0.318	--	0.672	--	--	0.650	--
OU2MW-02D	0.058	--	0.088	--	--	0.060	--
Dissolved Oxygen (mg/L)							
OU2MW-30S	31.0	31.0	32.0	25.0	27.0	30.0	20.0
OU2MW-30I	30.0	45.0	31.0	32.0	37.0	37.0	25.0
OU2MW-30I2	42.0	43.0	35.0	35.0	42.0	37.0	40.0
OU2MW-30I3	30.0	48.0	40.0	39.0	35.0	33.0	19.0
OU2MW-30D	42.0	48.0	31.0	43.0	40.0	40.0	44.0
OU2MW-30D2	1.0	3.0	12.0	13.0	22.0	17.0	12.0
OU2MW-39S	28.0	28.0	15.0	35.0	27.0	10.0	15.0
OU2MW-39I	33.0	35.0	31.0	30.0	43.0	25.0	25.0
OU2MW-39I2	2.0	9.0	12.0	20.0	24.0	18.0	17.0
OU2MW-39D	1.0	5.0	1.0	1.0	0.0	1.0	2.0
OU2MW-47S	23.0	36.0	29.0	34.0	35.0	12.0	25.0
OU2MW-47I	36.0	43.0	37.0	45.0	46.0	42.0	30.0
OU2MW-47I2	35.0	48.0	39.0	39.0	45.0	47.0	31.0
OU2MW-47D	30.0	43.0	41.0	47.0	54.0	47.0	29.0
OU2MW-19I	--	18.2	--	--	25.0	--	--
OU2MW-19I2	--	37.6	--	--	37.0	--	--
OU2MW-19D	--	2.8	--	--	8.6	--	--
OU2MW-02S	25.0	--	30.0	--	--	38.0	--
OU2MW-02I	30.0	--	32.0	--	--	30.0	--
OU2MW-02I2	3.4	--	0.8	--	--	1.0	--
OU2MW-02D	2.9	--	0.3	--	--	0.7	--

Appendix E - Table E-2
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Well ID	2013				2014		
	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14
Temperature (degrees Celcius)							
OU2MW-30S	19.9	19.0	18.9	15.0	13.3	11.3	10.4
OU2MW-30I	16.3	16.4	16.1	14.9	14.5	13.3	6.0
OU2MW-30I2	17.2	16.6	16.3	13.7	13.2	13.1	13.5
OU2MW-30I3	19.2	16.8	15.6	14.4	13.9	12.9	12.7
OU2MW-30D	17.6	17.2	15.9	13.5	13.7	12.9	13.2
OU2MW-30D2	17.1	17.3	15.1	14.5	14.4	13.2	12.1
OU2MW-39S	16.6	16.3	13.9	14.5	11.8	8.9	8.2
OU2MW-39I	14.1	15.0	13.7	14.4	12.7	11.6	10.9
OU2MW-39I2	14.9	14.3	13.3	13.3	12.5	11.5	10.6
OU2MW-39D	14.9	14.1	13.2	13.0	12.3	12.1	10.5
OU2MW-47S	18.0	18.9	16.3	14.6	15.0	11.3	9.7
OU2MW-47I	16.4	18.9	15.7	15.1	17.9	13.1	12.6
OU2MW-47I2	16.2	16.5	15.2	14.3	15.4	13.6	12.8
OU2MW-47D	16.1	16.0	15.2	14.3	17.8	13.3	12.8
OU2MW-19I	--	17.5	--	--	13.4	--	--
OU2MW-19I2	--	16.1	--	--	13.4	--	--
OU2MW-19D	--	16.3	--	--	13.0	--	--
OU2MW-02S	19.4	--	14.7	--	--	9.8	--
OU2MW-02I	17.3	--	13.3	--	--	9.6	--
OU2MW-02I2	16.1	--	13.7	--	--	10.2	--
OU2MW-02D	16.7	--	13.3	--	--	9.4	--
Oxidation Reduction Potential							
OU2MW-30S	194	207	224	249	273	253	257
OU2MW-30I	198	234	245	252	268	239	118
OU2MW-30I2	215	236	237	224	252	222	186
OU2MW-30I3	222	261	271	282	306	289	283
OU2MW-30D	240	253	247	261	285	260	244
OU2MW-30D2	167	191	240	260	304	276	277
OU2MW-39S	154	202	232	176	183	205	231
OU2MW-39I	86	166	213	163	151	195	184
OU2MW-39I2	-33	-22	145	157	101	151	116
OU2MW-39D	68	90	86	82	142	55	105
OU2MW-47S	195	242	232	230	223	253	130
OU2MW-47I	185	224	227	223	213	237	171
OU2MW-47I2	191	235	217	226	220	220	193
OU2MW-47D	192	237	210	240	215	233	194
OU2MW-19I	--	161	--	--	227	--	--
OU2MW-19I2	--	155	--	--	231	--	--
OU2MW-19D	--	120	--	--	187	--	--
OU2MW-02S	189	--	230	--	--	158	--
OU2MW-02I	160	--	210	--	--	203	--
OU2MW-02I2	-17	--	-32	--	--	-100	--
OU2MW-02D	71	--	71	--	--	137	--

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Well ID	2014										2015									
	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15
pH (SU)																				
OU2MW-30S	5.66	5.85	5.74	5.57	5.84	5.51	5.78	5.56	5.85	5.74	5.62	5.22	5.85	5.79	5.71	6.06	5.59	5.24	4.64	5.10
OU2MW-30I	5.97	6.22	6.04	5.68	6.11	6.39	6.08	6.11	6.27	6.19	6.04	6.37	6.27	6.60	6.06	6.39	5.90	5.32	4.85	5.38
OU2MW-30I2	6.32	5.91	5.83	5.36	5.79	5.93	5.78	5.69	5.92	6.05	5.78	6.14	6.14	6.48	6.04	6.37	5.89	5.10	4.83	5.52
OU2MW-30I3	5.04	5.18	5.07	4.83	5.38	5.12	5.17	4.91	4.86	4.91	4.97	4.81	5.20	4.95	4.99	5.38	5.02	4.99	4.52	5.07
OU2MW-30D	5.76	5.36	5.23	4.82	5.48	5.64	5.35	5.09	4.88	5.27	5.14	5.65	5.46	5.81	5.25	5.61	5.11	4.93	4.59	5.09
OU2MW-30D2	5.28	5.28	5.34	4.94	5.32	5.47	5.42	5.31	5.08	5.29	5.17	5.28	5.51	5.25	5.19	5.63	5.18	5.03	4.53	5.21
OU2MW-39S	5.71	5.74	5.29	5.58	5.84	5.09	5.34	6.16	5.96	5.87	5.57	6.71	5.36	5.55	5.59	5.50	5.60	4.80	5.35	5.23
OU2MW-39I	6.91	6.97	6.28	6.08	6.77	6.27	6.19	6.23	6.28	6.34	6.40	6.55	6.36	6.72	6.55	6.46	6.51	5.33	6.29	5.85
OU2MW-39I2	6.12	6.31	6.29	5.75	5.98	5.31	4.24	6.50	6.31	6.17	5.76	5.80	5.96	5.98	5.73	5.70	6.03	5.35	4.83	5.74
OU2MW-39D	4.84	5.23	4.85	4.80	5.02	4.80	4.48	4.52	4.48	4.48	4.78	4.35	4.83	4.95	4.77	4.60	4.80	4.57	4.17	4.84
OU2MW-47S	5.91	5.60	5.13	5.74	5.74	5.67	5.02	5.71	5.73	5.70	5.75	5.73	5.79	5.86	5.40	5.19	5.31	5.13	5.10	5.10
OU2MW-47I	6.20	5.93	5.59	6.16	6.02	6.08	5.40	5.99	5.95	6.08	6.11	5.98	6.10	6.12	5.62	5.71	5.78	5.48	5.37	5.50
OU2MW-47I2	6.09	5.83	5.27	5.92	5.95	6.05	5.44	5.81	5.87	6.01	5.97	5.91	6.02	6.12	5.57	5.39	5.42	5.12	5.26	5.34
OU2MW-47D	6.31	6.06	6.09	6.08	6.13	5.98	5.64	6.18	5.94	6.11	6.12	6.04	5.96	6.24	5.69	5.52	5.62	5.31	5.41	5.43
OU2MW-19I	--	6.70	--	--	--	6.57	5.63	--	--	5.80	--	--	--	5.99	--	6.02	--	--	5.24	--
OU2MW-19I2	--	6.32	--	--	--	6.17	5.77	--	--	6.03	--	--	--	5.79	--	6.14	--	--	6.00	--
OU2MW-19D	--	5.46	--	--	--	5.16	4.72	--	--	4.75	--	--	--	4.88	--	5.27	--	--	4.59	--
OU2MW-02S	--	6.06	--	--	--	5.72	5.64	--	--	--	--	5.83	--	--	5.79	--	5.91	--	--	5.17
OU2MW-02I	--	5.97	--	--	--	5.66	5.29	--	--	--	--	5.47	--	--	5.56	--	5.37	--	--	5.05
OU2MW-02I2	--	5.81	--	--	--	5.64	5.31	--	--	--	--	5.48	--	--	5.50	--	5.21	--	--	5.45
OU2MW-02D	--	5.47	--	--	--	5.17	4.83	--	--	--	--	4.76	--	--	5.06	--	4.74	--	--	4.96
Conductivity (mS/cm)																				
OU2MW-30S	0.514	0.613	0.646	0.382	0.407	0.371	0.302	0.391	0.376	0.303	0.438	0.422	0.465	0.373	0.249	0.264	0.252	0.413	0.479	0.481
OU2MW-30I	0.493	0.566	0.817	0.649	0.632	0.614	0.566	0.617	0.527	0.495	0.672	0.595	0.609	0.537	0.459	0.552	0.479	0.492	0.501	0.481
OU2MW-30I2	0.536	0.515	0.723	0.556	0.556	0.582	0.543	0.610	0.577	0.500	0.681	0.530	0.590	0.538	0.436	0.499	0.480	0.538	0.661	0.637
OU2MW-30I3	0.350	0.407	0.567	0.441	0.455	0.427	0.421	0.480	0.522	0.464	0.577	0.492	0.494	0.459	0.375	0.383	0.377	0.323	0.394	0.446
OU2MW-30D	0.393	0.417	0.586	0.483	0.457	0.458	0.439	0.509	0.559	0.544	0.676	0.516	0.579	0.530	0.482	0.457	0.420	0.357	0.959	0.406
OU2MW-30D2	1.140	1.100	1.600	1.23	1.20	1.19	1.13	1.23	1.28	1.200	1.400	1.160	1.240	1.180	0.906	0.933	0.906	0.777	0.415	0.967
OU2MW-39S	0.240	0.262	0.298	0.365	0.312	0.400	0.464	0.353	0.354	0.321	0.269	0.673	0.251	0.253	0.294	0.314	0.279	0.264	0.312	0.464
OU2MW-39I	0.600	0.673	0.673	0.796	0.756	0.747	0.734	0.757	0.777	0.721	0.872	0.667	0.654	0.613	0.606	0.646	0.698	0.745	0.637	0.643
OU2MW-39I2	0.529	0.601	0.618	0.460	0.396	0.327	0.002	0.416	0.358	0.455	0.464	0.447	0.524	0.503	0.490	0.506	0.523	0.588	0.559	0.500
OU2MW-39D	0.182	0.190	0.222	0.220	0.227	0.207	0.217	0.214	0.224	0.225	0.274	0.221	0.215	0.197	0.194	0.203	0.196	0.201	0.189	0.192
OU2MW-47S	0.330	0.311	0.317	0.313	0.492	0.468	0.488	0.401	0.471	0.438	0.384	0.323	0.290	0.275	0.363	0.393	0.313	0.283	0.441	0.501
OU2MW-47I	0.557	0.558	0.484	0.431	0.424	0.506	0.691	0.603	0.645	0.592	0.597	0.797	0.687	0.565	0.682	0.584	0.429	0.314	0.509	0.607
OU2MW-47I2	0.477	0.490	0.430	0.570	0.604	0.481	0.532	0.475	0.481	0.466	0.419	0.384	0.380	0.338	0.368	0.335	0.399	0.336	0.393	0.440
OU2MW-47D	0.209	0.202	0.195	0.163	0.176	0.168	0.204	0.174	0.190	0.199	0.209	0.205	0.196	0.190	0.206	0.179	0.132	0.106	0.156	0.340
OU2MW-19I	--	0.602	--	--	--	1.25	1.55	--	--	1.260	--	--	--	0.677	--	0.85	--	--	0.794	--
OU2MW-19I2	--	0.497	--	--	--	1.16	1.28	--	--	0.565	--	--	--	0.572	--	0.93	--	--	1.320	--
OU2MW-19D	--	0.614	--	--	--	0.699	0.755	--	--	0.753	--	--	--	0.724	--	0.64	--	--	0.597	--
OU2MW-02S	--	0.554	--	--	--	0.494	0.431	--	--	--	0.524	--	--	0.461	--	0.425	--	--	0.365	--
OU2MW-02I	--	0.638	--	--	--	0.648	0.726	--	--	--	0.748	--	--	0.595	--	0.343	--	--	0.397	--
OU2MW-02I2	--	0.563	--	--	--	0.655	0.810	--	--	--	0.758	--	--	0.443	--	0.401	--	--	0.979	--
OU2MW-02D	--	0.053	--	--	--	0.052	0.053	--	--	--	0.060	--	--	0.052	--	0.038	--	--	0.054	--
Dissolved Oxygen (mg/L)																				
OU2MW-30S	17.0	33.0	19.0	27.0	32.0	31.0	24.0	33.0	32.0	38.7	29.8	41.5	25.0	32.0	29.0	29.0	28.0	19.0	23.0	18.0
OU2MW-30I	20.0	27.0	26.0	28.0	34.0	27.0	25.0	25.0	30.0	50.0	50.0	50.0	26.0	29.0	31.0	36.0	26.0	18.0	21.0	17.0
OU2MW-30I2	31.0	25.0	44.0	30.0	32.0	28.0	30.0	37.0	27.0	50.0	50.0	46.7	26.0	31.0	29.0	22.0	31.0	21.0	24.0	17.0
OU2MW-30I3	44.0	32.0	44.0	32.0	34.0	34.0	26.0	28.0	25.0	39.5	50.0	43.6	25.0	36.0	29.0	31.0	32.0	31.0	21.0	20.0
OU2MW-30D	32.0	21.0	42.0	26.0	34.0	24.0	26.0	29.0	23.0	50.0	50.0	18.9	22.0	33.0	26.0	28.0	33.0	30.0	25.0	19.0
OU2MW-30D2	18.0	20.0	14.0	15.0	12.0	26.0	21.0	26.0	21.0	19.9	11.96	15.2	25.0	28.7	16.0	23.0	27.0	31.0	21.0	18.0
OU2MW-39S	18.0	25.0	21.0	30.0	26.0	27.0	30.0	21.0	8.0	23.7	14.9	40.5	16.0	12.0	22.0	21.0	21.0	24.0	35.0	17.0
OU2MW-39I	26.0	29.0	28.0	34.0	38.0	30.0	31.0	27.0	23.0	45.5	19.29	50.0	23.0	24.0	20.0	24.0	17.0	18.0	12.0	18.0
OU2MW-39I2	14.0	22.0	20.0	30.0	24.0	30.0	32.0	27.0	23.0	24.35	13.0	14.3	16.0	27.0	16.0	25.0	20.0	22.0	23.0	18.0
OU2MW-39D	0.0	2.0	2.0	0.0	0.0	0.2	0.2	0.2	4.5	1.0	1.84	9.3	4.0	5.0	3.0	0.2	0.4	3.0	0.4	0.6
OU2MW-47S	27.0	31.0	26.0	26.0	29.0	29.0	34.0	18.0	28.0	13.0	8.8	36.8	27.0	23.0	27.0	22.0	27.0	28.0	23.0	30.0
OU2MW-47I	43.0	41.0	25.0	25.0	23.0	31.0	30.0	20.0	21.0	4.6	5.3	42.3	27.0	26.0	33.0	37.0	34.0	36.0	21.0	31.0
OU2MW-47I2	28.0	44.0	27.0	30.0	29.0	17.0	24.0	23.0	21.0	19.2	7.5	44.1	21.0	21.0	33.0	55.0	27.0	34.0	25.0	31.0
OU2MW-47D	39.0	42.0	22.0	26.0	30.0	29.0	26.0	22.0	22.0	21.6	4.7	42.0	21.0	21.0	30.0	34.0	29.0	29.0	40.0	28.0
OU2MW-19I	--	17.0	--	--	--	9.6	9.4	--	--	16.40	--	--	--	31.50	--	16.36	--	--	47.670	--
OU2MW-19I2	--	20.0	--	--	--	38.5	45.0	--	--	46.00	--	--	--	37.40	--	29.69	--	--	50.000	--
OU2MW-19D	--	4.2	--	--	--	4.6	2.0	--	--	0.74	--	--	--	2.80	--	1.10	--	--	4.250	--
OU2MW-02S	--	18.0	--	--	--	29.35	34.30	--	--	--	--	40.10	--	--	19.36	--	29.51	--	--	16.2
OU2MW-02I	--	19.0	--	--	--	30.73	40.53	--	--	--	--	49.60	--	--	20.03	--	50.0	--	--	31.0
OU2MW-02I2	--	2.3	--	--	--	0.51	1.85	--	--	--	--	1.50	--	--	4.07	--	0.40	--	--	0.5
OU2MW-02D	--	1.6	--	--	--	0.46	3.00	--	--	--	--	2.00	--	--	3.30	--	0.50	--	--	0.5

Appendix E - Table E-2
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 Bay Shore/Brightwaters Former MGP Site

Well ID	2014										2015									
	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15
Temperature (degrees Celcius)																				
OU2MW-30S	11.4	14.4	22.5	17.90	19.57	18.4	18.20	16.68	12.51	11.74	10.93	8.87	10.15	12.69	17.89	19.20	20.40	19.49	18.75	16.41
OU2MW-30I	13.2	14.4	21.0	15.20	15.38	15.8	14.49	14.60	10.96	12.50	11.10	10.10	12.03	16.00	15.67	16.70	18.10	15.56	15.15	14.58
OU2MW-30I2	13.3	14.8	18.7	15.34	16.25	15.5	14.15	14.40	12.51	12.28	10.13	10.90	12.19	17.00	16.10	17.00	19.00	15.74	14.95	14.75
OU2MW-30I3	13.6	14.6	19.9	15.60	15.78	14.5	14.62	14.57	12.08	12.44	12.55	12.30	12.75	13.08	16.68	17.00	17.90	14.39	15.38	14.80
OU2MW-30D	13.4	14.7	18.7	15.50	16.81	15.6	14.05	13.96	11.91	11.79	10.90	12.20	13.40	12.80	15.72	16.60	19.30	14.63	15.07	15.15
OU2MW-30D2	13.6	14.4	18.7	15.13	15.22	16.3	14.62	13.94	12.36	12.46	11.25	11.46	12.99	13.73	15.89	18.30	19.20	15.03	15.95	15.02
OU2MW-39S	10.0	12.0	14.1	15.39	16.55	16.4	16.27	13.89	12.23	8.98	2.94	9.07	12.52	11.60	16.72	16.95	22.55	16.91	10.71	8.87
OU2MW-39I	12.5	13.3	14.0	13.88	14.41	14.6	14.77	13.82	13.08	12.06	2.35	9.80	15.25	13.08	18.65	18.01	22.49	17.40	13.09	11.01
OU2MW-39I2	13.8	13.9	14.8	13.73	14.14	15.5	15.11	12.87	12.33	11.25	3.65	7.98	16.74	13.36	20.10	18.60	24.18	16.61	12.24	9.18
OU2MW-39D	12.4	13.4	14.6	13.45	13.55	14.2	13.70	15.88	12.22	10.97	3.42	8.45	17.73	14.31	20.20	15.09	24.55	17.18	13.16	9.76
OU2MW-47S	13.7	14.8	15.3	18.80	17.80	18.7	16.59	14.67	14.80	12.20	10.70	8.60	12.20	14.20	17.80	15.47	20.00	18.50	17.93	15.00
OU2MW-47I	15.5	16.4	14.3	19.70	17.70	18.2	14.73	13.89	14.20	14.50	15.20	11.80	11.70	14.10	15.60	13.63	17.40	19.60	15.78	13.90
OU2MW-47I2	15.0	15.4	15.8	20.00	17.90	17.3	14.91	14.14	14.90	14.50	13.20	12.70	13.80	15.70	16.40	14.09	17.90	18.40	13.94	14.60
OU2MW-47D	14.9	17.4	15.6	18.70	16.70	18.9	14.68	--	--	15.40	14.80	13.20	14.80	14.60	18.00	14.81	16.80	16.70	13.81	--
OU2MW-19I	--	12.9	--	--	--	15.94	15.49	--	--	12.06	--	--	--	12.63	--	16.16	--	--	16.37	--
OU2MW-19I2	--	14.2	--	--	--	15.31	13.96	--	--	11.35	--	--	--	13.66	--	16.08	--	--	13.82	--
OU2MW-19D	--	14.2	--	--	--	15.56	13.54	--	--	11.12	--	--	--	13.87	--	15.42	--	--	14.82	--
OU2MW-02S	--	15.1	--	--	--	16.63	14.03	--	--	--	--	9.04	--	--	17.38	--	18.38	--	--	19.21
OU2MW-02I	--	15.9	--	--	--	15.33	13.62	--	--	--	--	8.25	--	--	19.11	--	19.90	--	--	14.53
OU2MW-02I2	--	15.7	--	--	--	14.84	13.29	--	--	--	--	8.85	--	--	18.62	--	18.30	--	--	13.39
OU2MW-02D	--	15.9	--	--	--	14.50	13.17	--	--	--	--	7.49	--	--	18.23	--	17.80	--	--	12.88
Oxidation Reduction Potential																				
OU2MW-30S	201	284	298	278	248	265	267	284	270	252	284	260	251	194	216	213	241	213	229	259
OU2MW-30I	198	235	282	270	231	147	258	260	267	235	259	246	245	194	219	185	219	215	228	268
OU2MW-30I2	217	252	227	283	231	212	270	271	280	234	273	256	250	201	227	191	227	228	227	268
OU2MW-30I3	271	317	306	327	269	292	299	311	319	326	301	334	291	269	339	235	263	272	247	294
OU2MW-30D	250	276	238	312	259	192	293	296	297	318	291	241	283	242	331	211	248	231	232	297
OU2MW-30D2	270	301	269	319	244	266	281	288	300	311	282	271	275	252	338	235	251	254	255	288
OU2MW-39S	183	182	219	209	228	166	163	219	237	208	261	216	259	260	261	245	260	262	160	295
OU2MW-39I	108	169	167	193	189	145	163	173	190	182	157	212	229	233	216	187	202	205	99	260
OU2MW-39I2	87	95	90	157	203	123	196	220	230	212	217	107	217	239	207	208	207	204	223	244
OU2MW-39D	27	60	76	110	141	131	140	133	149	131	162	141	142	165	133	138	123	140	171	181
OU2MW-47S	230	212	241	188	186	174	177	191	228	185	209	271	285	252	122	301	300	212	252	208
OU2MW-47I	236	213	214	169	265	204	163	187	217	175	196	248	271	233	178	321	319	187	250	196
OU2MW-47I2	246	195	243	180	179	205	170	180	218	182	215	261	287	231	152	330	281	205	170	203
OU2MW-47D	249	197	155	163	177	219	167	182	202	181	208	239	271	224	157	326	328	189	170	199
OU2MW-19I	--	177	--	--	--	225	119	--	--	262	--	--	--	181	--	228.00	--	--	185	--
OU2MW-19I2	--	178	--	--	--	202	106	--	--	274	--	--	--	211	--	201.00	--	--	140	--
OU2MW-19D	--	170	--	--	--	163	94	--	--	135	--	--	--	175	--	62.00	--	--	175	--
OU2MW-02S	--	190	--	--	--	152	218	--	--	--	--	207	--	--	191	--	218	--	--	203
OU2MW-02I	--	157	--	--	--	146	178	--	--	--	--	234	--	--	226	--	196	--	--	235
OU2MW-02I2	--	-99	--	--	--	-49	-123	--	--	--	--	58	--	--	-21	--	-78	--	--	-107
OU2MW-02D	--	54	--	--	--	99	132	--	--	--	--	153	--	--	142	--	67	--	--	91

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Well ID	2016												2017							
	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	July-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17
pH (SU)																				
OU2MW-30S	--	5.60	3.68	5.37	5.58	5.78	6.16	6.31	5.94	--	--	6.36	--	--	6.36	--	6.02	--	--	--
OU2MW-30I	--	5.72	4.27	5.57	5.74	6.02	6.37	6.49	6.14	--	--	6.31	--	--	6.28	--	6.15	--	--	--
OU2MW-30I2	--	5.81	4.34	5.58	5.70	5.96	6.29	6.47	6.26	--	--	6.45	--	--	6.56	--	6.26	--	--	--
OU2MW-30I3	--	5.01	3.53	4.88	5.10	5.15	5.58	5.79	5.35	--	--	5.65	--	--	5.64	--	5.41	--	--	--
OU2MW-30D	--	--	3.59	4.98	5.18	5.17	5.53	5.70	5.35	--	--	5.56	--	--	5.62	--	5.27	--	--	--
OU2MW-30D2	--	--	3.64	5.23	5.51	5.38	5.73	5.94	5.63	--	--	6.00	--	--	5.74	--	5.40	--	--	--
OU2MW-39S	4.68	5.77	5.93	5.42	5.48	2.49	5.81	6.02	5.92	--	--	6.08	--	--	6.17	--	--	--	6.18	--
OU2MW-39I	5.18	6.56	6.69	6.33	6.39	3.93	6.74	6.82	6.73	--	--	6.82	--	--	6.92	--	--	--	6.94	--
OU2MW-39I2	5.14	6.12	6.18	5.76	5.71	3.34	5.92	6.13	6.13	--	--	6.27	--	--	6.37	--	--	--	6.49	--
OU2MW-39D	4.39	4.71	4.75	4.39	4.39	2.14	4.97	5.09	5.99	--	--	4.93	--	--	5.25	--	--	--	5.25	--
OU2MW-47S	5.46	5.45	5.05	5.19	5.18	5.37	5.86	5.30	5.40	--	--	5.91	--	--	6.21	--	5.65	--	--	--
OU2MW-47I	5.75	5.67	5.22	5.37	5.31	5.25	6.02	5.61	5.64	--	--	5.85	--	--	6.43	--	5.82	--	--	--
OU2MW-47I2	5.67	5.63	5.24	5.38	5.31	5.52	6.02	5.47	5.52	--	--	6.26	--	--	6.49	--	5.76	--	--	--
OU2MW-47D	5.59	5.49	5.08	5.37	5.23	5.28	5.98	5.44	5.47	--	--	5.78	--	--	6.25	--	5.57	--	--	--
OU2MW-19I	--	--	--	5.97	--	6.15	--	6.28	--	--	--	--	6.45	6.66	--	--	--	6.42	--	--
OU2MW-19I2	--	--	--	6.03	--	5.91	--	6.39	--	--	--	--	6.74	6.88	--	--	--	6.65	--	--
OU2MW-19D	--	--	--	4.74	--	4.76	--	5.38	--	--	--	--	5.39	5.56	--	--	--	5.27	--	--
OU2MW-02S	--	--	--	5.57	--	5.33	--	6.04	--	--	--	--	6.09	6.09	--	--	--	6.16	--	--
OU2MW-02I	--	--	--	5.26	--	4.75	--	5.66	--	--	--	--	5.80	5.91	--	--	--	5.96	--	--
OU2MW-02I2	--	--	--	5.24	--	5.39	--	5.57	--	--	--	--	5.81	5.48	--	--	--	6.19	--	--
OU2MW-02D	--	--	--	4.64	--	4.54	--	5.44	--	--	--	--	5.46	5.85	--	--	--	5.76	--	--
Conductivity (mS/cm)																				
OU2MW-30S	--	0.550	0.407	0.519	0.472	0.481	0.321	0.334	0.330	--	--	0.501	--	--	0.630	--	0.788	--	--	--
OU2MW-30I	--	0.504	0.386	0.573	0.511	0.541	0.483	0.551	0.522	--	--	0.510	--	--	0.742	--	0.997	--	--	--
OU2MW-30I2	--	0.516	0.390	0.522	0.448	0.475	0.557	0.780	0.763	--	--	0.568	--	--	0.559	--	1.110	--	--	--
OU2MW-30I3	--	0.428	0.379	0.585	0.571	0.541	0.469	0.513	0.438	--	--	0.540	--	--	0.678	--	0.891	--	--	--
OU2MW-30D	--	--	0.671	0.485	0.435	0.470	0.400	0.461	0.430	--	--	0.490	--	--	0.580	--	0.740	--	--	--
OU2MW-30D2	--	--	0.311	1.040	0.985	0.980	0.889	1.030	0.965	--	--	1.020	--	--	0.922	--	1.10	--	--	--
OU2MW-39S	0.487	0.374	0.311	0.338	0.297	0.244	0.287	0.365	0.454	--	--	0.560	--	--	0.508	--	--	--	0.291	--
OU2MW-39I	0.683	0.629	0.585	0.628	0.594	0.485	0.589	0.740	0.770	--	--	0.738	--	--	0.799	--	--	--	0.627	--
OU2MW-39I2	0.538	0.427	0.351	0.478	0.484	0.389	0.485	0.613	0.598	--	--	0.516	--	--	0.687	--	--	--	0.636	--
OU2MW-39D	0.195	0.204	0.205	0.225	0.211	0.164	0.186	0.230	0.232	--	--	0.228	--	--	0.257	--	--	--	0.228	--
OU2MW-47S	0.454	0.462	0.495	0.483	0.374	0.374	0.304	0.284	0.341	--	--	0.618	--	--	0.578	--	0.79	--	--	--
OU2MW-47I	0.491	0.415	0.436	0.557	0.499	0.356	0.361	0.407	0.389	--	--	0.643	--	--	0.556	--	1.03	--	--	--
OU2MW-47I2	0.421	0.441	0.465	0.588	0.528	0.491	0.485	0.434	0.732	--	--	0.641	--	--	0.426	--	0.70	--	--	--
OU2MW-47D	0.467	0.584	0.743	0.791	0.658	0.507	0.565	0.366	0.335	--	--	0.402	--	--	0.551	--	1.55	--	--	--
OU2MW-19I	--	--	--	1.030	--	0.839	--	1.08	--	--	--	--	0.948	0.918	--	--	--	1.000	--	--
OU2MW-19I2	--	--	--	0.622	--	0.679	--	0.62	--	--	--	--	0.679	0.563	--	--	--	0.452	--	--
OU2MW-19D	--	--	--	0.537	--	0.563	--	0.34	--	--	--	--	0.495	0.475	--	--	--	0.444	--	--
OU2MW-02S	--	--	--	0.609	--	0.479	--	0.40	--	--	--	--	0.586	0.661	--	--	--	0.487	--	--
OU2MW-02I	--	--	--	0.503	--	0.388	--	0.40	--	--	--	--	0.388	0.414	--	--	--	0.245	--	--
OU2MW-02I2	--	--	--	1.120	--	1.020	--	1.16	--	--	--	--	0.991	0.062	--	--	--	0.809	--	--
OU2MW-02D	--	--	--	0.059	--	0.056	--	0.04	--	--	--	--	0.061	1.090	--	--	--	0.035	--	--
Dissolved Oxygen (mg/L)																				
OU2MW-30S	--	18.0	17.0	23.0	28.0	24.0	29.0	29.0	32.0	--	--	23.0	--	--	19.0	--	21.0	--	--	--
OU2MW-30I	--	19.0	17.0	25.0	25.0	23.0	36.0	34.0	39.0	--	--	39.0	--	--	21.0	--	43.0	--	--	--
OU2MW-30I2	--	19.0	16.0	21.0	24.0	16.0	42.0	45.0	36.0	--	--	25.0	--	--	22.0	--	46.4	--	--	--
OU2MW-30I3	--	21.0	17.0	25.0	24.0	18.0	36.0	30.0	39.0	--	--	33.0	--	--	22.0	--	37.0	--	--	--
OU2MW-30D	--	--	18.0	25.0	24.0	24.0	36.0	43.0	37.0	--	--	31.0	--	--	18.0	--	27.0	--	--	--
OU2MW-30D2	--	--	17.0	23.0	22.0	16.0	17.0	21.0	14.0	--	--	6.0	--	--	3.9	--	18.00	--	--	--
OU2MW-39S	25.8	14.0	12.0	10.0	13.0	21.0	22.0	20.0	22.0	--	--	25.0	--	--	17.0	--	--	--	17.0	--
OU2MW-39I	34.6	20.0	17.0	15.0	17.0	23.0	9.0	24.0	31.0	--	--	31.0	--	--	12.9	--	--	--	14.0	--
OU2MW-39I2	36.2	16.0	15.0	14.0	16.0	23.0	21.0	22.0	26.0	--	--	24.0	--	--	17.4	--	--	--	30.0	--
OU2MW-39D	17.2	3.0	5.0	5.0	5.0	3.0	7.0	0.4	0.4	--	--	2.0	--	--	0.6	--	--	--	1.0	--
OU2MW-47S	46.5	20.0	21.0	18.0	26.0	20.0	30.0	22.0	25.0	--	--	20.0	--	--	20.0	--	19.00	--	--	--
OU2MW-47I	50.0	24.0	21.0	28.0	26.0	21.0	36.0	44.0	34.0	--	--	29.0	--	--	26.0	--	21.00	--	--	--
OU2MW-47I2	50.0	23.0	23.0	21.0	26.0	30.0	33.0	28.0	42.0	--	--	25.0	--	--	24.0	--	27.00	--	--	--
OU2MW-47D	50.0	24.0	24.0	26.0	31.0	19.0	37.0	26.0	22.0	--	--	27.0	--	--	24.0	--	18.00	--	--	--
OU2MW-19I	--	--	--	29.6	--	26.0	--	11.0	--	--	--	--	50.0	27.9	--	--	--	16.5	--	--
OU2MW-19I2	--	--	--	50.0	--	31.0	--	29.1	--	--	--	--	22.6	31.8	--	--	--	32.1	--	--
OU2MW-19D	--	--	--	16.6	--	15.2	--	13.4	--	--	--	--	50.0	19.4	--	--	--	9.5	--	--
OU2MW-02S	--	--	--	50.0	--	44.9	--	28.9	--	--	--	--	14.6	23.8	--	--	--	28.3	--	--
OU2MW-02I	--	--	--	50.0	--	46.9	--	19.1	--	--	--	--	20.6	30.4	--	--	--	23.0	--	--
OU2MW-02I2	--	--	--	0.8	--	0.6	--	0.7	--	--	--	--	1.6	6.7	--	--	--	0.0	--	--
OU2MW-02D	--	--	--	0.9	--	0.5	--	3.9	--	--	--	--	3.7	1.3	--	--	--	0.0	--	--

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
 OU-2 Oxygen Injection System
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 Bay Shore/Brightwaters Former MGP Site

Well ID	2016													2017						
	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	July-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17
Temperature (degrees Celcius)																				
OU2MW-30S		11.00	12.89	11.10	11.60	12.08	20.68	18.38	20.78	--	--	16.52	--	--	11.90	--	12.21	--	--	--
OU2MW-30I		11.90	14.70	11.90	12.60	12.27	18.01	16.13	19.10	--	--	14.35	--	--	13.98	--	13.50	--	--	--
OU2MW-30I2		11.70	14.94	12.10	12.50	12.42	18.83	17.11	19.15	--	--	13.98	--	--	14.01	--	13.77	--	--	--
OU2MW-30I3		12.00	14.47	12.70	11.40	12.64	18.75	16.46	19.80	--	--	14.03	--	--	14.09	--	14.22	--	--	--
OU2MW-30D		--	14.87	13.10	13.20	12.04	17.11	16.80	21.20	--	--	13.47	--	--	14.03	--	13.42	--	--	--
OU2MW-30D2		--	14.97	12.90	12.10	12.46	19.69	16.53	20.00	--	--	14.26	--	--	14.01	--	13.54	--	--	--
OU2MW-39S	10.96	11.50	10.90	11.40	13.40	14.26	18.84	19.68	21.33	--	--	15.09	--	--	6.69	--	--	--	15.10	--
OU2MW-39I	11.80	12.60	11.90	12.50	12.80	17.27	22.44	18.59	20.29	--	--	14.48	--	--	10.80	--	--	--	14.69	--
OU2MW-39I2	12.19	13.40	11.30	11.90	11.00	18.47	18.32	21.39	17.53	--	--	14.81	--	--	9.80	--	--	--	15.82	--
OU2MW-39D	12.06	11.90	10.20	10.20	8.00	19.01	23.29	20.08	19.66	--	--	14.25	--	--	11.10	--	--	--	15.46	--
OU2MW-47S	13.90	11.10	11.00	10.50	14.30	12.44	16.17	16.94	18.74	--	--	14.40	--	--	12.57	--	12.04	--	--	--
OU2MW-47I	13.70	12.40	12.50	11.90	15.10	15.28	15.53	15.23	17.40	--	--	13.08	--	--	13.83	--	13.16	--	--	--
OU2MW-47I2	13.30	11.80	12.10	11.60	16.00	13.57	16.07	18.20	17.39	--	--	12.34	--	--	13.37	--	13.75	--	--	--
OU2MW-47D	13.70	11.70	12.00	12.40	15.10	16.12	16.40	16.38	19.45	--	--	12.72	--	--	13.06	--	14.19	--	--	--
OU2MW-19I	--	--	--	10.50	--	12.21	--	16.4	--	--	--	--	14.28	12.36	--	--	--	12.62	--	--
OU2MW-19I2	--	--	--	12.10	--	13.11	--	16.2	--	--	--	--	13.02	12.36	--	--	--	13.39	--	--
OU2MW-19D	--	--	--	16.27	--	12.91	--	15.9	--	--	--	--	12.57	11.98	--	--	--	13.08	--	--
OU2MW-02S	--	--	--	11.70	--	15.86	--	15.5	--	--	--	--	11.63	7.74	--	--	--	13.35	--	--
OU2MW-02I	--	--	--	12.70	--	16.25	--	16.2	--	--	--	--	11.58	7.62	--	--	--	12.90	--	--
OU2MW-02I2	--	--	--	12.40	--	12.79	--	15.6	--	--	--	--	11.33	10.56	--	--	--	12.71	--	--
OU2MW-02D	--	--	--	12.00	--	12.30	--	15.1	--	--	--	--	9.83	10.40	--	--	--	12.90	--	--
Oxidation Reduction Potential																				
OU2MW-30S	--	231	338	229	152	185	223	271	190	--	--	117	--	--	238	--	217	--	--	--
OU2MW-30I	--	218	328	233	187	173	209	270	235	--	--	272	--	--	275	--	203	--	--	--
OU2MW-30I2	--	214	340	252	208	153	220	280	220	--	--	280	--	--	281	--	187	--	--	--
OU2MW-30I3	--	250	386	258	177	217	269	299	274	--	--	284	--	--	318	--	273	--	--	--
OU2MW-30D	--	--	275	246	184	204	254	286	267	--	--	288	--	--	325	--	273	--	--	--
OU2MW-30D2	--	--	387	238	148	193	254	273	245	--	--	226	--	--	212	--	188.00	--	--	--
OU2MW-39S	208	169	182	167	128	335	219	192	202	--	--	176	--	--	266	--	--	--	163	--
OU2MW-39I	191	132	141	112	72	276	172	197	200	--	--	151	--	--	245	--	--	--	173	--
OU2MW-39I2	200	101	132	108	83	296	219	185	245	--	--	168	--	--	247	--	--	--	187	--
OU2MW-39D	192	93	109	137	115	165	90	93	84	--	--	74	--	--	78	--	--	--	72	--
OU2MW-47S	208	191	239	232	208	210	201	230	237	--	--	200	--	--	262	--	272.00	--	--	--
OU2MW-47I	211	201	229	223	200	369	196	203	225	--	--	235	--	--	259	--	262.00	--	--	--
OU2MW-47I2	200	203	236	227	199	196	212	229	217	--	--	184	--	--	264	--	259.00	--	--	--
OU2MW-47D	212	215	273	220	199	375	195	218	229	--	--	223	--	--	280	--	273.00	--	--	--
OU2MW-19I	--	--	--	166	--	216	--	209.0	--	--	--	--	274	150	--	--	--	244	--	--
OU2MW-19I2	--	--	--	185	--	228	--	258.0	--	--	--	--	283	164	--	--	--	242	--	--
OU2MW-19D	--	--	--	142	--	137	--	121.0	--	--	--	--	162	135	--	--	--	201	--	--
OU2MW-02S	--	--	--	182	--	351	--	140.0	--	--	--	--	156	179	--	--	--	191	--	--
OU2MW-02I	--	--	--	179	--	380	--	216.0	--	--	--	--	248	183	--	--	--	258	--	--
OU2MW-02I2	--	--	--	-79	--	-99	--	-71.0	--	--	--	--	-117	42	--	--	--	-102	--	--
OU2MW-02D	--	--	--	112	--	122	--	75.0	--	--	--	--	76	-65	--	--	--	110	--	--

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 Bay Shore/Brightwaters Former MGP Site

Well ID	2018																
	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
pH (SU)																	
OU2MW-30S	6.10	--	--	5.96	--	--	6.03	--	6.28	--	--	6.22	--	--	--	6.68	--
OU2MW-30I	6.25	--	--	6.35	--	--	6.16	--	6.47	--	--	6.29	--	--	--	6.86	--
OU2MW-30I2	6.31	--	--	6.44	--	--	6.08	--	6.51	--	--	6.51	--	--	--	6.89	--
OU2MW-30I3	5.50	--	--	5.65	--	--	5.59	--	5.60	--	--	5.40	--	--	--	5.80	--
OU2MW-30D	5.34	--	--	5.50	--	--	5.44	--	5.73	--	--	5.48	--	--	--	5.39	--
OU2MW-30D2	5.44	--	--	5.54	--	--	5.51	--	5.78	--	--	5.57	--	--	--	5.74	--
OU2MW-39S	6.03	--	--	6.30	--	--	--	5.95	--	6.46	--	--	6.45	--	--	4.33	--
OU2MW-39I	6.83	--	--	6.95	--	--	--	6.65	--	7.38	--	--	7.44	--	--	7.12	--
OU2MW-39I2	6.19	--	--	6.47	--	--	--	6.07	--	6.39	--	--	6.70	--	--	6.66	--
OU2MW-39D	5.04	--	--	5.15	--	--	--	4.95	--	5.07	--	--	5.52	--	--	5.27	--
OU2MW-47S	5.52	--	5.47	--	--	--	5.27	--	--	5.89	--	--	6.19	--	--	5.87	--
OU2MW-47I	5.78	--	5.87	--	--	--	5.73	--	--	6.44	--	--	6.55	--	--	6.15	--
OU2MW-47I2	5.78	--	5.83	--	--	--	5.66	--	--	6.19	--	--	6.29	--	--	5.96	--
OU2MW-47D	5.68	--	5.81	--	--	--	5.68	--	--	5.85	--	--	5.87	--	--	5.88	--
OU2MW-19I	--	5.82	6.37	--	--	--	5.89	--	--	--	6.71	--	6.47	--	--	7.13	--
OU2MW-19I2	--	5.32	6.65	--	--	--	5.91	--	--	--	6.44	--	6.71	--	--	7.38	--
OU2MW-19D	--	5.29	5.10	--	--	--	4.93	--	--	--	5.08	--	5.17	--	--	5.80	--
OU2MW-02S	5.96	--	--	5.92	--	--	5.66	--	--	6.19	--	--	6.07	--	--	5.90	--
OU2MW-02I	5.72	--	--	5.82	--	--	5.66	--	--	5.75	--	--	5.60	--	--	5.60	--
OU2MW-02I2	5.80	--	--	5.81	--	--	5.80	--	--	5.93	--	--	5.85	--	--	6.11	--
OU2MW-02D	5.33	--	--	5.34	--	--	5.71	--	--	5.52	--	--	5.53	--	--	5.53	--
Conductivity (mS/cm)																	
OU2MW-30S	0.400	--	--	0.497	--	--	1.05	--	0.595	--	--	0.287	--	--	--	0.492	--
OU2MW-30I	0.680	--	--	0.552	--	--	0.526	--	0.305	--	--	0.313	--	--	--	0.787	--
OU2MW-30I2	0.611	--	--	0.509	--	--	0.523	--	0.319	--	--	0.376	--	--	--	0.617	--
OU2MW-30I3	0.767	--	--	0.593	--	--	0.419	--	0.232	--	--	0.259	--	--	--	0.272	--
OU2MW-30D	0.577	--	--	0.525	--	--	0.545	--	0.323	--	--	0.289	--	--	--	0.324	--
OU2MW-30D2	0.886	--	--	0.797	--	--	0.682	--	0.440	--	--	0.400	--	--	--	0.487	--
OU2MW-39S	0.486	--	--	0.513	--	--	--	0.433	--	0.155	--	--	0.292	--	--	0.134	--
OU2MW-39I	0.823	--	--	0.701	--	--	--	0.765	--	0.361	--	--	0.552	--	--	0.521	--
OU2MW-39I2	0.598	--	--	0.622	--	--	--	0.454	--	0.194	--	--	0.330	--	--	0.512	--
OU2MW-39D	0.249	--	--	0.222	--	--	--	0.225	--	0.111	--	--	0.155	--	--	0.184	--
OU2MW-47S	0.400	--	0.467	--	--	--	0.531	--	--	0.181	--	--	0.254	--	--	0.356	--
OU2MW-47I	0.684	--	0.623	--	--	--	0.484	--	--	0.346	--	--	0.364	--	--	0.450	--
OU2MW-47I2	0.442	--	0.428	--	--	--	0.643	--	--	0.301	--	--	0.421	--	--	0.410	--
OU2MW-47D	0.549	--	0.362	--	--	--	0.361	--	--	0.250	--	--	0.305	--	--	0.386	--
OU2MW-19I	--	1.030	1.170	--	--	--	1.05	--	--	--	0.679	--	1.010	--	--	0.761	--
OU2MW-19I2	--	0.800	1.330	--	--	--	0.553	--	--	0.357	--	--	0.890	--	--	0.377	--
OU2MW-19D	--	0.323	0.498	--	--	--	0.505	--	--	--	0.281	--	0.312	--	--	0.369	--
OU2MW-02S	0.551	--	--	0.548	--	--	0.508	--	--	0.341	--	--	0.289	--	--	0.502	--
OU2MW-02I	0.425	--	--	0.500	--	--	0.338	--	--	0.191	--	--	0.199	--	--	0.318	--
OU2MW-02I2	1.400	--	--	1.150	--	--	1.07	--	--	0.462	--	--	0.507	--	--	0.472	--
OU2MW-02D	0.070	--	--	0.072	--	--	0.342	--	--	0.037	--	--	0.037	--	--	0.041	--
Dissolved Oxygen (mg/L)																	
OU2MW-30S	35.00	--	--	25	--	--	18.0	--	23.0	--	--	25.00	--	--	--	27.00	--
OU2MW-30I	35.00	--	--	36	--	--	20.0	--	19.0	--	--	29.00	--	--	--	27.00	--
OU2MW-30I2	40.00	--	--	34	--	--	19.0	--	19.0	--	--	33.00	--	--	--	25.00	--
OU2MW-30I3	40.00	--	--	17	--	--	18.0	--	17.0	--	--	30.00	--	--	--	20.00	--
OU2MW-30D	34.00	--	--	21	--	--	22.0	--	21.0	--	--	23.00	--	--	--	26.00	--
OU2MW-30D2	18.00	--	--	19	--	--	8.0	--	10.0	--	--	4.00	--	--	--	21.00	--
OU2MW-39S	16.00	--	--	14	--	--	--	11.0	--	27.0	--	--	30.00	--	--	13.00	--
OU2MW-39I	17.00	--	--	17	--	--	--	18.0	--	18.0	--	--	22.00	--	--	23.00	--
OU2MW-39I2	23.00	--	--	8	--	--	--	7.0	--	4.0	--	--	6.00	--	--	1.00	--
OU2MW-39D	2.00	--	--	1	--	--	--	0.40	--	4.00	--	--	1.00	--	--	0.00	--
OU2MW-47S	19.00	--	27	--	--	--	14.0	--	--	26.00	--	--	30.00	--	--	16.00	--
OU2MW-47I	21.00	--	23	--	--	--	16.0	--	--	30.00	--	--	30.00	--	--	16.00	--
OU2MW-47I2	21.00	--	36	--	--	--	17.0	--	--	20.00	--	--	36.00	--	--	15.00	--
OU2MW-47D	20.00	--	27	--	--	--	18.0	--	--	37.00	--	--	35.00	--	--	16.00	--
OU2MW-19I	--	12.25	19.01	--	--	--	16.68	--	--	--	8.58	--	12.11	--	--	16.21	--
OU2MW-19I2	--	13.35	21.87	--	--	--	26.75	--	--	--	27.63	--	27.12	--	--	16.70	--
OU2MW-19D	--	0.38	19.49	--	--	--	14.17	--	--	--	4.66	--	14.76	--	--	21.34	--
OU2MW-02S	34.87	--	--	26.9	--	--	22.16	--	--	26.27	--	--	22.28	--	--	37.55	--
OU2MW-02I	42.74	--	--	26.3	--	--	24.26	--	--	13.12	--	--	15.61	--	--	16.88	--
OU2MW-02I2	0.38	--	--	0.3	--	--	0.75	--	--	0.00	--	--	0.00	--	--	0.00	--
OU2MW-02D	0.45	--	--	0.5	--	--	7.80	--	--	0.00	--	--	0.00	--	--	0.05	--

Appendix E - Table E-2
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 OU-2 Oxygen Injection System
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 Bay Shore/Brightwaters Former MGP Site

Well ID	2018																
	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Temperature (degrees Celcius)																	
OU2MW-30S	19.43	--	--	15.32	--	--	10.23	--	13.49	--	--	22.56	--	--	--	15.52	--
OU2MW-30I	16.23	--	--	14.11	--	--	12.71	--	15.41	--	--	21.36	--	--	--	13.42	--
OU2MW-30I2	16.27	--	--	14.40	--	--	13.01	--	15.78	--	--	20.07	--	--	--	13.18	--
OU2MW-30I3	15.78	--	--	13.16	--	--	13.64	--	15.21	--	--	19.95	--	--	--	13.51	--
OU2MW-30D	16.05	--	--	13.64	--	--	14.98	--	15.93	--	--	21.78	--	--	--	12.31	--
OU2MW-30D2	15.55	--	--	13.07	--	--	12.96	--	15.42	--	--	20.87	--	--	--	13.32	--
OU2MW-39S	17.84	--	--	10.27	--	--	--	11.40	--	21.16	--	--	23.40	--	--	15.20	--
OU2MW-39I	17.58	--	--	10.01	--	--	--	12.73	--	21.25	--	--	23.28	--	--	14.37	--
OU2MW-39I2	18.36	--	--	10.46	--	--	--	14.35	--	22.50	--	--	23.58	--	--	12.53	--
OU2MW-39D	20.15	--	--	10.14	--	--	--	15.39	--	24.51	--	--	26.38	--	--	13.00	--
OU2MW-47S	17.82	--	18.50	--	--	--	11.48	--	--	15.85	--	--	18.19	--	--	14.87	--
OU2MW-47I	16.30	--	16.55	--	--	--	12.25	--	--	16.39	--	--	15.13	--	--	13.69	--
OU2MW-47I2	17.61	--	16.77	--	--	--	12.47	--	--	17.29	--	--	15.65	--	--	13.11	--
OU2MW-47D	16.47	--	17.38	--	--	--	12.45	--	--	18.40	--	--	14.76	--	--	12.85	--
OU2MW-19I	--	16.29	15.26	--	--	--	12.08	--	--	--	16.78	--	20.41	--	--	16.65	--
OU2MW-19I2	--	15.78	15.34	--	--	--	12.80	--	--	--	18.07	--	19.79	--	--	14.84	--
OU2MW-19D	--	15.68	15.24	--	--	--	12.26	--	--	--	20.62	--	19.89	--	--	14.69	--
OU2MW-02S	16.57	--	--	15.29	--	--	9.77	--	--	16.98	--	--	21.13	--	--	11.67	--
OU2MW-02I	15.59	--	--	14.21	--	--	10.82	--	--	18.08	--	--	20.34	--	--	12.07	--
OU2MW-02I2	15.75	--	--	13.74	--	--	10.70	--	--	17.67	--	--	22.77	--	--	12.45	--
OU2MW-02D	15.39	--	--	12.49	--	--	10.64	--	--	17.76	--	--	22.95	--	--	12.60	--
Oxidation Reduction Potential																	
OU2MW-30S	132	--	--	204	--	--	194	--	332	--	--	179	--	--	--	238	--
OU2MW-30I	224	--	--	210	--	--	199	--	344	--	--	251	--	--	--	246	--
OU2MW-30I2	226	--	--	211	--	--	208	--	353	--	--	245	--	--	--	264	--
OU2MW-30I3	247	--	--	222	--	--	224	--	348	--	--	298	--	--	--	322	--
OU2MW-30D	264	--	--	260	--	--	215	--	380	--	--	284	--	--	--	363	--
OU2MW-30D2	157	--	--	132	--	--	120	--	228	--	--	156	--	--	--	246	--
OU2MW-39S	221	--	--	164	--	--	--	229	--	248	--	--	293	--	--	414	--
OU2MW-39I	206	--	--	168	--	--	--	187	--	196	--	--	261	--	--	324	--
OU2MW-39I2	215	--	--	179	--	--	--	211	--	180	--	--	233	--	--	171	--
OU2MW-39D	73	--	--	102	--	--	--	64	--	110	--	--	119	--	--	80	--
OU2MW-47S	225	--	219	--	--	--	202	--	--	258	--	--	338	--	--	262	--
OU2MW-47I	227	--	198	--	--	--	187	--	--	251	--	--	321	--	--	267	--
OU2MW-47I2	245	--	206	--	--	--	201	--	--	264	--	--	340	--	--	283	--
OU2MW-47D	260	--	208	--	--	--	200	--	--	287	--	--	342	--	--	284	--
OU2MW-19I	--	151	122	--	--	--	199	--	--	--	229	--	285	--	--	171	--
OU2MW-19I2	--	247	151	--	--	--	227	--	--	--	148	--	288	--	--	181	--
OU2MW-19D	--	201	231	--	--	--	155	--	--	--	227	--	263	--	--	282	--
OU2MW-02S	108	--	--	119	--	--	103	--	--	211	--	--	174	--	--	225	--
OU2MW-02I	204	--	--	97	--	--	113	--	--	238	--	--	181	--	--	227	--
OU2MW-02I2	-115	--	--	-118	--	--	-117	--	--	-8	--	--	-67	--	--	-23	--
OU2MW-02D	88	--	--	61	--	--	2	--	--	119	--	--	73	--	--	110	--

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Well ID	2019				2020			2021				2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
	Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
pH (SU)																
OU2MW-30S	5.59	6.56	6.67	6.31	6.21	6.17	6.69	6.26	6.13	6.43	6.16	6.04	6.39	6.28	5.88	6.26
OU2MW-30I	6.4	7.17	7.35	6.94	6.66	6.59	6.69	6.84	6.57	7.01	6.84	6.69	6.83	6.64	6.05	6.84
OU2MW-30I2	6.76	6.98	6.94	6.51	6.54	6.4	5.5	6.58	6.61	8.01	6.84	6.70	6.75	6.54	6.02	7.08
OU2MW-30I3	5.8	6.1	5.63	5.76	5.13	5.45	5.73	5.69	5.36	5.74	5.51	5.51	5.29	6.10	5.48	5.51
OU2MW-30D	5.66	5.76	5.59	--	5.13	5.44	5.38	5.48	5.48	5.52	5.30	5.25	5.56	5.99	5.48	5.41
OU2MW-30D2	5.3	5.92	5.42	5.69	5.73	5.63	5.82	5.81	5.71	5.76	5.69	5.66	5.7	6.15	5.55	5.70
OU2MW-39S	5.09	4.84	--	6.26	6.00	5.99	5.87	5.99	5.48	6.47	6.27	6.25	6.26	5.67	5.70	6.31
OU2MW-39I	6.66	7.5	7.55	7.55	6.95	7.14	6.53	7.70	6.56	7.48	7.26	7.27	7.27	7.49	6.44	7.32
OU2MW-39I2	5.29	6.32	--	5.97	4.75	5.55	5.57	5.67	4.91	6	6.09	5.87	6.34	5.60	5.46	6.08
OU2MW-39D	4.88	4.33	5.12	5.25	4.05	5.00	4.62	4.40	4.33	5.43	5.13	5.34	5.39	6.97	4.95	5.32
OU2MW-47S	3.96	5.84	5.91	5.86	5.54	5.66	5.87	6.14	4.25	5.96	5.76	5.53	6.00	6.33	5.56	5.81
OU2MW-47I	6.01	6.4	6.49	6.31	6.07	6.08	6.44	6.78	5.04	6.47	6.53	6.13	6.61	6.55	5.97	6.44
OU2MW-47I2	6.61	6.24	6.18	6.29	5.84	5.75	5.95	6.14	5.22	6.05	5.92	5.78	6.03	6.28	5.95	5.95
OU2MW-47D	6.45	6.07	5.85	5.64	5.48	5.45	5.62	5.68	4.66	5.71	5.63	5.21	5.46	5.55	5.75	5.50
OU2MW-19I	6.66	6.84	6.97	6.75	6.85	6.63	6.71	6.75	6.39	6.83	6.80	6.74	6.41	7.51	6.40	6.70
OU2MW-19I2	6.91	6.71	7.21	6.50	6.52	5.93	5.98	5.80	5.23	6.64	6.74	6.72	6.01	5.94	6.16	6.53
OU2MW-19D	5.29	5.19	5.29	5.21	5.45	4.92	4.97	5.07	4.76	5.35	5.34	4.99	4.77	7.09	5.40	5.11
OU2MW-02S	5.38	6.35	6.32	6.20	5.65	5.99	6.47	6.29	5.50	6.31	6.01	6.16	6.44	6.88	5.91	6.23
OU2MW-02I	5.68	5.63	5.68	6.07	5.27	5.09	5.04	5.24	5.36	5.48	5.51	5.42	5.73	6.12	5.86	5.54
OU2MW-02I2	5.79	6.23	6.21	6.06	5.87	5.72	5.80	6.00	5.54	6.15	5.88	6.08	6.53	6.14	5.84	6.16
OU2MW-02D	4.86	4.99	4.65	5.24	5.37	4.9	5.34	5.20	4.86	5.58	5.10	5.35	5.61	5.74	5.19	5.41
Conductivity (mS/cm)																
OU2MW-30S	0.402	0.381	0.231	0.281	0.553	0.267	0.491	0.264	0.593	0.488	0.311	0.32	0.434	0.485	0.42	0.39
OU2MW-30I	0.753	0.744	0.511	0.573	0.76	0.52	0.634	0.390	0.495	0.575	0.424	0.427	0.521	0.646	0.60	0.49
OU2MW-30I2	0.714	0.556	0.447	0.618	0.915	0.494	0.002	0.541	0.509	0.544	0.446	0.448	0.499	0.424	0.56	0.48
OU2MW-30I3	0.47	0.422	0.293	0.280	0.478	0.371	0.462	0.295	0.383	0.471	0.359	0.361	0.295	0.727	0.46	0.37
OU2MW-30D	0.504	0.437	0.287	--	0.462	0.392	0.002	0.411	0.388	0.468	0.348	0.351	0.300	0.521	0.45	0.37
OU2MW-30D2	0.699	0.601	0.442	0.384	0.637	0.49	0.564	0.505	0.46	0.574	0.444	0.452	0.354	0.561	0.66	0.46
OU2MW-39S	0.22	0.367	--	0.325	0.331	0.295	0.284	0.270	0.243	0.265	0.284	0.29	0.213	0.211	0.33	0.26
OU2MW-39I	0.648	0.431	0.508	0.634	0.541	0.565	0.586	0.500	0.383	0.611	0.466	0.465	0.344	0.408	0.67	0.47
OU2MW-39I2	0.25	0.273	--	0.169	0.445	0.23	0.22	0.197	0.19	0.201	0.215	0.197	0.251	0.233	0.43	0.22
OU2MW-39D	0.205	0.243	0.139	0.140	0.452	0.212	0.196	0.180	0.176	0.175	0.170	0.171	0.146	0.133	0.30	0.17
OU2MW-47S	0.173	0.274	0.189	0.256	0.323	0.294	0.334	0.312	0.227	0.304	0.282	0.296	0.312	0.303	0.38	0.30
OU2MW-47I	0.726	0.649	0.4	0.495	0.500	0.438	0.635	0.498	0.437	0.539	0.524	0.472	0.452	0.640	0.59	0.50
OU2MW-47I2	0.548	0.556	0.891	0.384	0.473	0.392	0.357	0.454	0.356	0.402	0.256	0.255	0.314	0.490	0.53	0.31
OU2MW-47D	0.459	0.39	0.284	0.419	0.758	0.272	0.247	0.329	0.224	0.257	0.388	0.339	0.38	0.341	0.44	0.34
OU2MW-19I	0.991	1.09	0.887	0.645	1.05	0.981	0.714	0.623	0.671	1.08	1.19	0.923	1.09	0.631	0.84	1.07
OU2MW-19I2	0.354	0.714	0.697	0.425	0.390	0.383	0.438	0.317	0.355	0.715	1.30	0.43	0.95	0.553	0.62	0.85
OU2MW-19D	0.421	0.55	0.376	0.481	0.516	0.365	0.413	0.324	0.394	0.39	0.350	0.272	0.517	1.310	0.63	0.38
OU2MW-02S	0.64	0.731	0.396	0.537	0.530	0.450	0.442	0.565	0.428	0.543	0.384	0.561	0.570	0.405	0.54	0.51
OU2MW-02I	0.721	0.726	0.505	0.619	0.674	0.515	0.592	0.582	0.428	0.566	0.437	0.558	0.494	0.178	0.49	0.51
OU2MW-02I2	0.446	0.262	0.226	0.281	0.345	0.431	0.507	0.394	0.221	0.243	0.178	0.248	0.192	0.122	0.44	0.22
OU2MW-02D	0.06	0.079	0.05	0.058	0.066	0.053	0.064	0.062	0.053	0.057	0.060	0.075	0.074	0.037	0.08	0.07
Dissolved Oxygen (mg/L)																
OU2MW-30S	13	24	31	26	12	28	25	12	7	17	20	2	8	0.0	25.00	11.75
OU2MW-30I	23	27	29	28	16	24	23	12	7	16	24	16	11	0.0	28.92	16.75
OU2MW-30I2	17	24	26	29	17	25	13	27	9	15	21	6	19	0.7	30.73	15.25
OU2MW-30I3	17	25	31	23	18	27	23	13	14	25	24	13	19	0.0	29.64	20.25
OU2MW-30D	18	21	31	--	20	28	17	24	17	13	22	15	15	0.5	30.67	16.25
OU2MW-30D2	17	22	29	6	4	21	20	16	9	11	5	2	2	0.0	17.07	5.00
OU2MW-39S	11	24	--	15	12	23	12	3	1	15	5	5	5	1.8	20.67	7.50
OU2MW-39I	17	26	22	18	9	22	23	8	9	17	11	8	7	7.2	25.65	10.75
OU2MW-39I2	9	31	--	23	35	6	3	8	4	19	9	1	6	0.0	9.87	8.75
OU2MW-39D	1	1	0	0	0	0	2	1	2	15	8	1	2	0.0	1.50	6.50
OU2MW-47S	14	18	22	30	13	32	21	8	15	25	3	6	8	0.0	25.59	10.50
OU2MW-47I	14	17	21	23	16	26	24	11	23	29	12	16	15	0.0	28.97	18.00
OU2MW-47I2	22	18	31	23	15	26	21	14	23	28	6	22	6	0.0	29.63	15.50
OU2MW-47D	24	31	25	24	16	26	19	12	22	32.34	3	12	7	0.0	27.70	13.59
OU2MW-19I	21.28	21.82	17.29	24.84	22.6	20.09	24.77	23.64	20.83	27.67	24.30	6.00	9.00	0.0	18.28	16.74
OU2MW-19I2	25.62	38.24	22	40.34	36.8	19.7	24.12	15.24	11.73	35.36	34.32	11	8	0.0	26.84	22.17
OU2MW-19D	25.92	41.37	22.37	22.46	20.33	9.15	8.12	13.05	9.2	5.71	24.71	6	5	0.0	11.12	10.36
OU2MW-02S	22.67	40.5	35.47	30.22	38.50	33.46	27.22	29.29	30.53	23.80	19	20	25	1.8	24.27	21.95
OU2MW-02I	16.11	26.64	25.28	18.16	5.2	18.01	11.68	19.4	0.27	3.98	2	4	14	0.4	17.87	6.00
OU2MW-02I2	0	0	0	0	0	0	0	7.06	0	0	0	1	0	0.5	1.04	0.25
OU2MW-02D	0	0	0	0	0	0	0	1.17	0	0	0	1	2	0.9	1.12	0.75

Appendix E - Table E-2
 Summary of Groundwater Parameter Data
 OU-2 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	2019				2020			2021				2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
	Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
Temperature (degrees Celcius)																
OU2MW-30S	10.76	13.88	19.14	16.57	8.22	19.96	13.55	11.79	17.84	20.2	13.28	13.47	11.87	15.0	15.86	14.71
OU2MW-30I	12.26	14.45	15.67	15.01	9.51	16.16	13.88	13.58	15.85	15.98	13.54	14.36	12.71	14.3	14.94	14.15
OU2MW-30I2	12.3	13.91	16.07	14.22	10.93	15.92	37.45	13.23	17.41	18.19	12.92	14.14	12.74	14.5	15.24	14.50
OU2MW-30I3	12.62	15.38	23.22	14.27	11.92	16.14	13.34	12.97	16.2	30.52	13.49	13.76	16.26	14.3	15.03	18.51
OU2MW-30D	12.14	14.08	21.24	--	11.25	17.18	12.9	13.43	17.17	16.03	14.40	13.43	16.42	14.0	14.93	15.07
OU2MW-30D2	12.64	14.85	21.85	14.15	11.89	16.55	13.18	13.20	16.42	16	13.19	13.34	16.18	14.2	15.04	14.68
OU2MW-39S	4.81	14.94	--	13.68	11.01	21.53	13.99	4.10	14.21	23.47	16.62	12.92	17.6	9.2	13.81	17.65
OU2MW-39I	4.78	13.9	25.02	13.50	12.53	22.94	16.08	12.12	16.83	23.31	15.20	13.68	18.68	12.9	14.38	17.72
OU2MW-39I2	9.75	15.35	--	11.99	11.66	24.48	14.16	5.85	18.18	21.25	14.13	12.15	18.36	12.0	14.16	16.47
OU2MW-39D	5.33	13.99	22.75	11.65	11.67	23.83	14.02	3.67	18.05	20.28	14.07	12.03	21.67	11.9	14.08	17.01
OU2MW-47S	8.2	11.53	16.54	14.80	14.66	18.06	16.51	11.61	22.42	18.57	15.42	13.32	13.68	12.6	15.09	15.25
OU2MW-47I	11.79	11.92	15.52	13.60	15.96	14.99	15.92	14.01	21.97	16.69	15.00	14.75	13.36	13.8	14.92	14.95
OU2MW-47I2	12.98	13.95	15.63	13.04	13.09	16.26	15.63	12.85	24.79	17.45	14.02	14.46	14.12	13.1	15.09	15.01
OU2MW-47D	11.46	13.6	15.59	12.34	14.98	15.5	15.33	12.33	24.27	17.46	13.76	13.79	14.77	13.4	15.01	14.95
OU2MW-19I	6.11	13	20.38	15.30	12.67	17.06	13.80	13.59	12.66	16.44	18.56	13.53	11.70	17.7	14.50	15.06
OU2MW-19I2	8.79	14.11	20.81	13.84	13.22	16.32	13.9	13.56	14.48	16.38	15.7	12.89	12.15	15.3	14.48	14.28
OU2MW-19D	10.47	14.37	16.72	12.56	12.48	16.49	13.74	12.01	13.78	16.08	15.65	12.3	12.66	15.2	14.35	14.17
OU2MW-02S	10.42	16.75	18.03	16.42	9.68	17	13.41	6.2	20.49	19.05	14.69	12.84	18.06	16.7	15.09	16.16
OU2MW-02I	11.33	16.08	15.68	16.40	11.94	16.10	10.73	6.74	19.21	17.65	12.76	10.70	20.62	18.0	14.70	15.43
OU2MW-02I2	12.06	17.66	17.45	13.86	12.22	15.57	10.75	6.01	18.31	17.25	12.61	9.84	19.28	16.0	14.47	14.75
OU2MW-02D	11.88	15.8	18.65	13.52	12.19	15.68	11.3	7.56	17.6	17.26	13.69	9.96	19.49	17.2	14.42	15.10
Oxidation Reduction Potential																
OU2MW-30S	350	264	215	202	201	248	175	314	269	168	193	170	314	11	227.26	211.25
OU2MW-30I	314	306	212	235	209	259	186	296	283	189	181	163	316	-119	214.63	212.25
OU2MW-30I2	298	257	228	283	225	269	212	219	284	157	187	168	310	-53	224.55	205.50
OU2MW-30I3	320	260	256	260	295	311	222	334	319	255	247	227	383	19	247.10	278.00
OU2MW-30D	304	285	245	--	312	320	270	300	319	266	254	253	352	87	245.13	281.25
OU2MW-30D2	220	188	199	134	131	183	97	198	298	130	102	133	181	-96	203.62	136.50
OU2MW-39S	279	230	--	178	274	255	214	233	234	228	201	191	293	147	212.05	228.25
OU2MW-39I	170	175	130	133	246	214	281	150	216	182	178	160	210	17	176.21	182.50
OU2MW-39I2	198	198	--	216	412	258	235	249	268	258	238	225	268	128	162.74	247.25
OU2MW-39D	43	127	90	45	90	79	141	126	131	104	31	41	178	38	97.84	88.50
OU2MW-47S	252	346	196	321	293	278	248	261	267	244	208	220	280	-62	232.26	238.00
OU2MW-47I	210	334	196	316	274	284	245	234	237	217	176	203	277	-104	224.17	218.25
OU2MW-47I2	261	240	196	335	246	293	276	263	222	238	213	223	288	75	226.37	240.50
OU2MW-47D	272	260	231	343	303	303	290	288	244	270	195	258	308	79	222.20	257.75
OU2MW-19I	219	212	194	268	280	237	166	224	139	176	86	137	161	-102	149.46	140.00
OU2MW-19I2	218	218	185	208	317	280	195	259	242	200	161	135	211	54	200.36	176.75
OU2MW-19D	249	275	151	262	197	183	117	181	163	161	188	143	218	-118	139.46	177.50
OU2MW-02S	236	157	136	156	192	165	135	184	145	24	101	115	251	-183	161.15	122.75
OU2MW-02I	222	184	69	26	100	202	183	267	46	27	-19	52	125	101	102.98	46.25
OU2MW-02I2	-13	-68	-46	15	-79	-60	-57	-49	-16	-115	-71	-77	-65	-6	-36.40	-82.00
OU2MW-02D	137	107	116	222	69	93	95	135	109	84	93	81	66	69	98.73	81.00

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2002					2003					2004						
		Jul-02	Aug-02	Sep-02	Oct-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Aug-03	Sep-03	Jan-04	Feb-04	Mar-04	May-04
pH (SU)																		
IO-10	OU-3 Community Road	6.17	6.52	6.04	6.46	6.38	6.31	6.43	6.52	7.39	6.29	6.41	6.33	6.45	6.20	6.56	6.49	--
MW-34S	OU-3 Community Road	6.03	5.96	6.04	6.12	6.97	6.29	6.23	6.59	8.43	6.29	5.99	6.06	6.03	5.91	6.49	6.66	--
MW-34I	OU-3 Community Road	6.30	6.07	6.17	6.62	7.09	6.99	6.31	6.32	6.44	6.57	6.47	6.71	6.80	6.39	6.89	6.86	--
MW-34D	OU-3 Community Road	6.17	5.90	6.06	6.07	6.31	6.20	6.39	6.14	6.38	6.01	5.80	6.14	6.29	6.10	6.74	6.72	--
MW-46WR	OU-3 Community Road	--	--	--	--	6.47	6.23	6.17	6.30	6.11	5.99	5.80	--	6.02	5.99	6.43	6.50	--
MW-70/70S	OU-3 Community Road	5.92	5.91	5.99	5.93	5.72	5.96	6.11	6.44	6.02	5.96	5.71	5.92	6.00	5.88	6.38	6.63	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.562	0.689	0.612	0.452	0.345	0.348	0.334	0.401	0.277	0.393	0.278	0.267	0.278	0.437	0.716	0.473	--
MW-34S	OU-3 Community Road	0.490	0.624	0.540	0.577	0.586	0.429	0.451	0.538	0.361	0.535	0.492	0.554	0.494	0.500	0.555	0.530	--
MW-34I	OU-3 Community Road	0.553	0.640	0.724	0.341	0.483	0.293	0.316	0.508	0.349	0.391	0.305	0.268	0.294	0.558	0.684	0.627	--
MW-34D	OU-3 Community Road	0.214	0.277	0.252	0.261	0.318	0.250	0.222	0.301	0.198	0.246	0.284	0.309	0.277	0.231	0.255	0.191	--
MW-46WR	OU-3 Community Road	--	--	--	--	0.476	0.372	0.391	0.455	0.616	0.991	0.821	--	0.609	0.721	1.140	1.330	--
MW-70/70S	OU-3 Community Road	0.388	0.578	0.556	0.477	0.422	0.310	0.339	0.606	1.250	0.328	0.356	0.443	0.355	0.394	0.481	0.340	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	12.0	0.8	10.0	5.5	16.0	8.0	0.0	2.5	25.0	22.0	19.0	11.0	12.0	7.0	5.0	4.0	--
MW-34S	OU-3 Community Road	0.4	0.0	1.0	0.2	0.0	0.0	2.0	0.0	1.8	0.0	0.8	0.8	0.2	0.0	0.0	0.0	--
MW-34I	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	--
MW-34D	OU-3 Community Road	1.0	1.0	1.6	0.9	1.6	0.4	2.0	0.0	1.2	1.0	1.0	0.8	0.4	0.4	0.0	0.0	--
MW-46WR	OU-3 Community Road	--	--	--	--	14.0	0.0	0.0	0.5	3.0	2.0	1.2	--	0.0	1.2	1.0	1.4	--
MW-70/70S	OU-3 Community Road	20.0	3.0	6.0	7.0	18.0	9.0	0.0	1.0	11.0	9.0	19.0	19.0	22.0	26.0	25.0	40.0	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2002					2003					2004						
		Jul-02	Aug-02	Sep-02	Oct-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Aug-03	Sep-03	Jan-04	Feb-04	Mar-04	May-04
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	17.3	18.9	19.8	18.7	15.5	14.1	9.5	10.9	11.4	13.6	15.9	18.0	17.5	10.7	9.8	10.1	--
MW-34S	OU-3 Community Road	21.2	21.5	22.0	19.5	12.4	8.9	5.0	5.9	8.3	13.1	16.6	21.5	18.8	7.6	6.8	7.7	--
MW-34I	OU-3 Community Road	16.4	16.1	17.5	18.3	16.3	14.4	11.9	11.7	10.7	12.7	14.2	16.2	16.6	12.6	11.9	11.0	--
MW-34D	OU-3 Community Road	15.7	15.9	16.3	16.7	14.8	14.9	11.0	13.0	12.8	13.0	14.3	15.2	14.7	13.0	13.4	12.2	--
MW-46WR	OU-3 Community Road	--	--	--	--	13.0	10.6	7.3	8.3	10.8	15.8	18.8	--	19.7	7.2	6.5	8.6	--
MW-70/70S	OU-3 Community Road	19.0	20.4	21.7	19.2	13.8	11.1	7.1	7.4	8.6	13.2	15.6	20.2	18.2	8.9	7.8	8.1	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	11	-125	3	-73.5	1	117	-159	-104	-23	-4	3	11	-12	-16	27	21	--
MW-34S	OU-3 Community Road	-150	-171	-24	-118.5	-67	35	85	-75	-71	-61	-115	-106	-42	-95	-140	-112	--
MW-34I	OU-3 Community Road	-147	-178	-142	-156	-100	-303	-222	-139	-164	-109	-137	-136	-117	-132	-150	-129	--
MW-34D	OU-3 Community Road	55	85	58	28.5	25	-16	45	118	85	22	62	77	114	132	-95	-20	--
MW-46WR	OU-3 Community Road	--	--	--	--	-23	-10	-172	-83	-50	-35	-79	--	-80	-71	-105	-69	--
MW-70/70S	OU-3 Community Road	94	8	2	-8	62	169	-37	-50	46	42	10	19	34	43	12	6	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2002					2003					2004						
		Jul-02	Aug-02	Sep-02	Oct-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Aug-03	Sep-03	Jan-04	Feb-04	Mar-04	May-04
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
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Well ID	Oxygen Injection System	2004					2005											
		Jun-04	Jul-04	Aug-04	Sep-04	Nov-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
pH (SU)																		
IO-10	OU-3 Community Road	6.20	6.02	6.17	6.41	--	6.73	6.49	6.36	6.46	6.30	6.34	6.34	6.37	6.39	6.20	6.14	6.14
MW-34S	OU-3 Community Road	6.44	5.77	5.97	5.62	--	6.21	6.04	6.06	6.19	5.96	5.84	5.88	5.84	6.05	5.85	6.12	6.03
MW-34I	OU-3 Community Road	6.50	6.27	6.46	6.48	--	6.71	6.46	6.39	6.37	6.35	6.42	6.56	6.40	6.74	6.02	6.24	6.28
MW-34D	OU-3 Community Road	5.70	5.78	6.03	5.69	--	6.32	5.99	5.95	6.24	6.03	6.03	6.07	6.15	6.07	5.74	5.98	5.99
MW-46WR	OU-3 Community Road	6.08	5.87	6.20	6.09	--	6.26	6.06	6.15	6.32	6.12	6.03	6.01	6.07	6.36	5.77	5.94	6.07
MW-70/70S	OU-3 Community Road	6.31	5.82	6.11	5.96	--	5.95	5.80	5.73	6.21	5.85	5.95	6.17	6.09	6.21	5.68	5.83	5.95
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.435	0.413	0.271	0.279	--	0.390	0.461	0.507	0.369	0.397	0.502	0.338	0.374	0.533	0.528	0.870	0.836
MW-34S	OU-3 Community Road	0.632	0.446	0.428	0.423	--	0.370	0.403	0.430	0.419	0.751	0.730	0.418	0.394	0.593	0.691	0.919	0.668
MW-34I	OU-3 Community Road	0.404	0.300	0.323	0.296	--	0.336	0.351	0.489	0.376	0.425	0.451	0.341	0.416	0.442	0.556	0.882	0.517
MW-34D	OU-3 Community Road	0.211	0.213	0.212	0.194	--	0.195	0.203	0.210	0.173	0.262	0.336	0.271	0.236	0.211	0.306	0.486	0.320
MW-46WR	OU-3 Community Road	1.220	0.709	0.629	0.432	--	0.535	1.000	1.565	2.370	2.230	1.420	1.350	0.549	0.940	0.551	1.100	1.000
MW-70/70S	OU-3 Community Road	0.645	0.644	0.630	0.435	--	0.311	0.296	0.516	0.449	0.574	0.600	0.392	0.355	0.415	0.469	0.718	0.501
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	0.0	0.0	2.0	0.0	--	0.0	0.1	0.0	0.0	0.0	0.0	16.0	0.0	12.0	38.0	0.0	20.0
MW-34S	OU-3 Community Road	0.0	0.0	0.0	0.0	--	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-34I	OU-3 Community Road	0.0	0.0	0.0	0.0	--	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-34D	OU-3 Community Road	0.0	0.0	0.0	0.0	--	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-46WR	OU-3 Community Road	0.0	0.0	0.5	0.0	--	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-70/70S	OU-3 Community Road	0.0	0.0	0.0	0.0	--	27.0	27.0	14.0	7.0	0.0	0.4	3.0	0.0	0.0	5.9	0.0	0.0
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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 Summary of Groundwater Parameter Data
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 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2004					2005											
		Jun-04	Jul-04	Aug-04	Sep-04	Nov-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	18.4	19.0	17.7	19.5	--	11.3	11.0	10.2	11.8	13.1	15.3	17.0	18.1	19.6	17.4	16.6	16.3
MW-34S	OU-3 Community Road	18.7	20.6	20.0	21.2	--	8.0	6.6	6.8	11.4	12.8	16.8	18.7	21.2	22.1	17.6	15.8	10.4
MW-34I	OU-3 Community Road	15.4	16.5	16.9	17.9	--	11.6	11.6	10.7	11.7	11.5	14.4	14.6	16.1	18.1	16.9	16.7	15.3
MW-34D	OU-3 Community Road	15.9	16.0	15.8	16.4	--	11.8	12.8	12.4	12.9	12.5	14.6	14.8	15.9	16.5	15.4	15.4	15.0
MW-46WR	OU-3 Community Road	21.9	24.0	22.8	22.7	--	8.6	7.4	7.6	13.7	16.0	20.1	22.6	23.5	24.0	18.9	15.1	11.8
MW-70/70S	OU-3 Community Road	19.4	20.3	20.9	20.7	--	7.8	8.1	7.6	10.4	12.3	17.0	18.5	20.5	21.1	18.4	15.0	11.4
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	-97	-101	-7	-72	--	-110	-96	-118	-117	-84	-92.5	11	-123	24	42	-53	44
MW-34S	OU-3 Community Road	-165	-109	-124	-123	--	-61	3	-33	-54	-183	-44	-141	-135	-88	-180	-39	-57
MW-34I	OU-3 Community Road	-150	-130	-144	-117	--	-87	-93	-106	-113	-141	-106	-156	-167	-137	-188	-130	-101
MW-34D	OU-3 Community Road	16	5	63	107	--	125	130	82	90	115	178	24	-15	191	-121	137	140
MW-46WR	OU-3 Community Road	-181	-119	-110	-110	--	-83	-67	-82.5	-103	-203	-94	-189	-148	-119	-291	-157	-108
MW-70/70S	OU-3 Community Road	-154	-117	-118	-148	--	68	105	73.5	40	-66	-62	-130	-132	-119	-279	-16	-45
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2004					2005											
		Jun-04	Jul-04	Aug-04	Sep-04	Nov-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2006												2007				
		Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
pH (SU)																		
IO-10	OU-3 Community Road	6.60	6.49	6.29	--	6.13	5.69	7.26	6.00	6.44	6.16	6.79	6.51	6.10	6.26	6.22	5.97	6.09
MW-34S	OU-3 Community Road	6.39	6.09	6.00	--	6.07	5.94	6.37	6.04	6.19	6.16	6.48	6.26	6.01	6.01	6.04	6.21	6.16
MW-34I	OU-3 Community Road	6.74	6.46	6.34	--	--	6.15	6.53	6.21	6.37	6.12	6.40	6.03	5.94	6.12	5.87	6.03	6.02
MW-34D	OU-3 Community Road	6.40	6.07	5.93	--	--	5.48	5.84	5.98	6.36	6.09	6.26	5.90	5.74	5.84	5.67	5.95	5.96
MW-46WR	OU-3 Community Road	6.36	6.06	5.95	--	6.11	5.79	7.53	5.96	6.29	6.25	6.18	5.81	5.57	5.72	5.79	5.82	5.93
MW-70/70S	OU-3 Community Road	6.19	6.02	5.99	--	6.18	5.68	7.40	5.92	6.12	6.00	6.18	5.71	5.68	5.92	6.22	5.99	6.20
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.444	0.403	0.326	--	0.390	0.328	0.477	0.469	0.447	0.478	0.674	0.611	0.578	0.604	0.588	0.390	0.252
MW-34S	OU-3 Community Road	1.190	0.731	0.400	--	0.469	0.454	0.651	0.472	0.549	0.564	0.653	0.542	0.614	0.460	0.520	0.381	0.373
MW-34I	OU-3 Community Road	0.479	0.441	0.277	--	--	0.249	0.448	0.427	0.459	0.457	0.814	0.545	0.580	0.461	0.579	0.364	0.301
MW-34D	OU-3 Community Road	0.274	0.279	0.261	--	--	0.171	0.265	0.250	0.247	0.247	0.427	0.336	0.358	0.331	0.365	0.288	0.237
MW-46WR	OU-3 Community Road	0.830	0.604	1.200	--	0.950	1.180	0.638	0.583	0.441	0.629	0.726	5.810	0.592	0.635	0.695	0.443	0.345
MW-70/70S	OU-3 Community Road	0.654	0.541	0.353	--	0.387	0.327	0.504	0.373	0.433	0.493	0.674	0.597	0.570	0.543	0.445	0.424	0.327
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	5.0	8.0	42.0	--	20.0	33.0	32.0	28.0	34.0	0.0	35.0	30.0	34.0	36.0	34.0	35.0	36.0
MW-34S	OU-3 Community Road	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-34I	OU-3 Community Road	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-34D	OU-3 Community Road	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
MW-46WR	OU-3 Community Road	0.0	0.0	0.0	--	1.8	0.0	1.2	2.0	5.0	0.0	4.0	6.0	12.0	10.0	9.0	13.0	8.0
MW-70/70S	OU-3 Community Road	0.0	0.0	25.0	--	20.0	35.0	25.0	33.0	34.0	22.0	25.0	40.0	40.0	33.0	41.0	42.0	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2006												2007				
		Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	12.9	10.9	11.8	--	13.3	16.5	18.4	18.1	18.7	17.7	16.4	15.2	13.6	11.6	10.4	12.9	13.3
MW-34S	OU-3 Community Road	9.2	8.6	9.5	--	13.5	18.1	21.1	21.3	21.0	18.3	15.0	13.2	10.5	6.5	6.5	10.2	13.0
MW-34I	OU-3 Community Road	13.4	12.1	11.7	--	--	15.1	16.9	16.4	17.5	16.8	16.5	15.4	13.6	11.5	11.8	12.2	11.5
MW-34D	OU-3 Community Road	13.8	13.2	13.1	--	--	15.0	16.0	15.0	15.7	15.3	15.5	14.9	14.1	12.7	12.9	13.3	12.7
MW-46WR	OU-3 Community Road	9.8	9.1	10.5	--	18.4	22.0	24.2	24.3	22.4	19.0	15.7	13.3	11.9	7.9	8.1	13.9	16.0
MW-70/70S	OU-3 Community Road	9.5	8.6	9.4	--	14.1	17.6	20.4	20.2	19.9	17.7	15.6	13.5	11.5	8.3	6.8	9.7	11.9
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	44	5	51	--	42	42	129	30	40	-12	74	64	73	95	-88	-5	22
MW-34S	OU-3 Community Road	-127	-107	-150	--	-162	-177	-125	-121	-144	-77	-173	-207	-97	-165	-219	-361	-289
MW-34I	OU-3 Community Road	-109	-92	-109	--	--	-177	-81	-120	-121	-37	-93	-126	-79	-336	-267	-334	-130
MW-34D	OU-3 Community Road	159	180	175	--	--	202	135	162	171	210	173	94	-42	-301	-278	-172	38
MW-46WR	OU-3 Community Road	-143	-100	-74	--	-219	-136	-93	-130	-115	-84	-82	-76	6	-23	-136	-102	-94
MW-70/70S	OU-3 Community Road	-88	-90	14	--	-12	42	89	-7	-19	13	15	69	55	40	-110	-14	14
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
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Well ID	Oxygen Injection System	2006												2007				
		Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2007								2008								
		Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08
pH (SU)																		
IO-10	OU-3 Community Road	5.43	5.75	5.83	6.12	5.96	5.59	6.30	6.69	6.37	6.32	6.69	6.16	6.51	6.31	5.78	5.89	6.32
MW-34S	OU-3 Community Road	6.04	5.92	5.94	5.88	6.90	5.45	8.15	5.96	5.91	5.85	6.60	8.15	5.96	5.85	5.85	--	7.49
MW-34I	OU-3 Community Road	6.18	6.16	6.06	5.87	6.81	5.41	8.19	5.99	6.10	6.11	6.60	7.67	6.16	6.14	5.97	--	7.79
MW-34D	OU-3 Community Road	5.97	5.98	5.90	5.86	5.98	5.21	5.98	6.02	5.83	5.76	6.23	5.82	5.90	5.79	5.79	--	5.82
MW-46WR	OU-3 Community Road	5.97	6.09	5.85	5.72	6.34	5.27	7.26	5.29	5.79	5.68	6.48	6.58	5.90	5.87	5.71	5.66	6.76
MW-70/70S	OU-3 Community Road	6.05	6.06	5.89	5.95	6.62	5.43	7.18	6.10	6.03	5.97	6.59	7.03	6.28	--	6.24	6.11	6.81
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.285	0.335	0.389	0.436	0.330	0.514	0.389	0.515	0.473	0.434	0.412	0.393	0.291	0.600	0.326	0.314	0.329
MW-34S	OU-3 Community Road	0.512	0.484	0.608	0.673	0.367	0.495	0.409	0.588	0.387	0.398	0.387	0.484	0.374	0.754	0.301	--	0.549
MW-34I	OU-3 Community Road	0.275	0.248	0.317	0.401	0.343	0.445	0.344	0.360	0.393	0.422	0.391	0.332	0.265	0.440	0.249	--	0.360
MW-34D	OU-3 Community Road	0.251	0.216	0.269	0.295	0.222	0.337	0.259	0.276	0.284	0.292	0.293	0.305	0.277	0.509	0.219	--	0.283
MW-46WR	OU-3 Community Road	0.474	0.511	0.562	0.561	0.301	0.574	0.484	0.420	0.351	0.324	0.335	0.367	0.337	0.732	0.260	0.309	0.400
MW-70/70S	OU-3 Community Road	0.358	0.395	0.422	0.456	0.320	0.439	0.371	0.392	0.369	0.354	0.366	0.373	0.337	--	0.583	0.239	0.448
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	3.0	26.0	28.0	31.0	29.0	25.0	31.0	36.0	33.0	32.0	33.0	31.0	33.0	34.0	33.0	13.0	33.0
MW-34S	OU-3 Community Road	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	--	0.0
MW-34I	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.0	0.0	0.0	0.0	--	0.0
MW-34D	OU-3 Community Road	0.0	0.0	0.0	0.0	2.0	0.0	0.6	0.4	0.4	0.0	0.8	1.0	0.0	0.0	0.0	--	0.0
MW-46WR	OU-3 Community Road	0.0	1.2	5.0	8.0	8.0	21.0	18.0	24.0	24.0	24.0	17.0	20.0	17.0	20.0	18.0	4.0	20.0
MW-70/70S	OU-3 Community Road	44.0	12.0	28.0	39.0	31.0	33.0	34.0	31.0	29.0	34.0	35.0	24.0	34.0	--	31.0	23.0	22.0
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2007								2008								
		Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	16.3	17.5	18.9	18.3	16.9	17.1	13.7	11.1	10.7	10.8	12.4	15.5	17.0	18.7	20.1	20.3	18.8
MW-34S	OU-3 Community Road	17.2	19.2	20.2	20.7	19.0	14.6	10.9	8.7	6.8	7.9	11.6	14.0	17.9	20.7	21.3	--	21.2
MW-34I	OU-3 Community Road	14.8	14.8	16.6	17.5	17.2	16.2	14.1	12.0	10.9	12.1	12.1	12.8	15.3	17.2	17.0	--	18.1
MW-34D	OU-3 Community Road	14.2	14.7	15.8	16.1	15.7	15.6	13.8	12.6	12.7	13.4	12.9	13.6	15.1	16.0	16.6	--	16.7
MW-46WR	OU-3 Community Road	20.4	22.9	23.8	23.0	15.3	15.2	10.5	8.4	8.1	10.1	13.6	16.7	21.8	24.9	24.3	22.8	19.8
MW-70/70S	OU-3 Community Road	16.4	19.2	20.0	19.8	17.9	16.0	11.7	8.5	8.0	8.1	11.1	14.1	16.8	--	20.9	20.8	18.9
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	-35	89	75	80	169	434	95	32	18	126	213	125	140	163	170	126	136
MW-34S	OU-3 Community Road	-297	-247	-234	-198	-101	-10	-177	-85	-71	-86	-91	-157	-198	-134	-123	--	-55
MW-34I	OU-3 Community Road	-130	-50	-126	-108	-65	-15	-171	-71	-41	-31	-3	-66	-142	-74	-38	--	-37
MW-34D	OU-3 Community Road	47	82	94	70	93	218	131	-4	1	220	233	209	-25	109	197	--	141
MW-46WR	OU-3 Community Road	-207	-136	-98	-79	43	71	-71	5	17	27	-6	-55	-25	-20	-23	--	-39
MW-70/70S	OU-3 Community Road	-34	18	29	-42	-18	385	-32	2	-10	28	11	-32	-20	--	-69	-33	-47
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
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Well ID	Oxygen Injection System	2007							2008									
		Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2008			2009										2010			
		Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
pH (SU)																		
IO-10	OU-3 Community Road	6.83	6.02	6.56	6.22	6.07	6.35	6.17	6.61	--	6.58	6.15	--	5.87	5.98	5.93	5.88	5.27
MW-34S	OU-3 Community Road	6.85	8.76	6.09	6.16	5.86	6.33	6.10	6.25	6.05	6.35	5.79	6.49	6.26	6.00	5.87	5.85	6.15
MW-34I	OU-3 Community Road	6.84	8.02	5.97	5.84	5.61	5.92	5.83	5.70	6.05	6.46	6.09	6.47	5.82	5.73	5.66	5.56	5.13
MW-34D	OU-3 Community Road	6.06	5.47	5.90	5.78	5.62	5.95	5.96	6.00	5.87	6.26	5.82	6.39	5.79	5.66	5.72	5.49	5.88
MW-46WR	OU-3 Community Road	7.33	6.91	5.78	5.88	5.48	5.66	5.79	5.81	5.64	5.87	5.60	--	6.00	5.49	5.36	5.34	5.53
MW-70/70S	OU-3 Community Road	6.53	7.34	5.90	5.82	5.74	--	5.96	5.92	--	6.10	5.74	--	5.88	5.88	5.72	5.67	5.16
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	5.89	--	5.85	--	--	5.65	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	5.90	--	5.97	--	--	5.84	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	5.82	--	--	7.46	--	--	5.73
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	9.84	--	--	7.09	--	--	5.66
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	9.69	--	6.24	--	--	6.01	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	8.30	--	5.88	--	--	5.54	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	5.84	--	5.95	--	--	5.96	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	6.66	--	--	--	--	6.35
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	5.97	--	--	--	--	5.18
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.60
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.26
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.86
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.392	0.448	0.341	0.310	0.297	0.313	0.346	0.312	--	0.326	0.288	--	0.406	0.298	0.278	0.302	0.419
MW-34S	OU-3 Community Road	0.441	0.397	3.720	2.060	1.100	1.360	0.802	0.892	0.698	0.810	0.696	0.738	0.671	0.753	1.000	1.130	0.805
MW-34I	OU-3 Community Road	0.417	0.458	0.346	0.340	0.326	0.401	0.835	0.644	0.327	0.296	0.325	0.276	0.383	0.289	0.296	0.293	0.484
MW-34D	OU-3 Community Road	0.281	0.271	0.290	0.305	0.331	0.405	0.466	0.520	0.411	0.398	0.419	0.404	0.528	0.354	0.335	0.342	0.374
MW-46WR	OU-3 Community Road	0.426	0.407	0.557	0.597	0.769	1.130	2.770	0.797	0.422	0.383	0.550	--	0.647	0.365	0.383	0.413	0.467
MW-70/70S	OU-3 Community Road	0.456	0.393	0.417	0.461	0.519	0.502	0.634	0.704	--	1.020	0.435	--	0.836	0.718	0.573	0.552	0.721
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.446	--	0.282	--	--	1.210	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.252	--	0.187	--	--	0.221	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.598	--	--	0.693	--	--	0.845
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.484	--	--	0.300	--	--	0.493
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.653	--	0.781	--	--	0.619	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.516	--	0.397	--	--	0.253	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	0.307	--	0.402	--	--	0.345	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.793	--	--	--	--	0.473
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.383	--	--	--	--	0.457
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.235
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.355
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.275
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	27.0	32.0	33.0	28.0	35.0	22.0	32.0	33.0	--	27.0	29.0	--	35.0	24.0	22.0	12.0	29.0
MW-34S	OU-3 Community Road	0.0	0.0	1.6	0.0	0.0	0.4	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	1.0
MW-34I	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.0	6.0	18.0	3.0	0.0	3.0	0.0	0.0	5.0	11.0	6.0	12.7
MW-34D	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
MW-46WR	OU-3 Community Road	21.0	24.0	26.0	23.0	24.0	24.0	20.0	13.0	17.0	12.0	20.0	--	17.0	16.0	23.0	12.0	21.0
MW-70/70S	OU-3 Community Road	28.0	29.0	32.0	35.0	32.0	36.0	39.0	29.0	--	13.8	28.0	--	23.0	25.0	25.0	21.0	23.0
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	20.0	--	26.0	--	--	20.0	--

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Well ID	Oxygen Injection System	2008		2009												2010			
		Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.0	--	0.0	--	--	0.0	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.9	--	--	0.0	--	--	0.0
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--	0.0	--	--	0.0
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.0	--	0.0	--	--	0.0	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	4.1	--	0.0	--	--	8.0	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.0	--	0.0	--	--	0.0	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	25.0	--	--	--	--	6.5
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	0.7	--	--	--	--	--	19.0
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.0
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.2
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.3
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																			
IO-10	OU-3 Community Road	16.8	13.6	11.9	11.9	12.9	11.6	13.6	16.4	--	19.3	19.4	--	15.6	--	14.1	11.5	11.1	11.3
MW-34S	OU-3 Community Road	17.0	10.0	7.0	7.6	8.3	10.2	13.8	17.0	19.2	21.0	20.2	16.6	11.5	8.9	8.9	7.1	10.5	--
MW-34I	OU-3 Community Road	17.8	13.8	12.7	12.0	11.2	12.0	15.0	16.8	16.9	17.3	16.3	14.0	11.1	13.8	11.5	10.8	--	--
MW-34D	OU-3 Community Road	16.5	13.9	13.8	13.3	13.1	12.6	13.1	14.7	15.3	16.2	16.4	15.2	13.6	11.4	14.3	12.7	12.6	--
MW-46WR	OU-3 Community Road	16.9	10.9	8.5	8.8	11.0	12.3	16.1	20.3	23.3	24.7	22.3	--	14.2	10.5	5.6	7.3	11.5	--
MW-70/70S	OU-3 Community Road	16.7	11.5	6.7	8.8	10.1	9.9	12.8	16.2	--	20.1	21.5	--	13.5	10.2	3.4	6.8	10.7	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	19.2	--	14.2	--	--	8.2	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	16.0	--	14.5	--	--	11.0	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	19.3	--	--	--	12.1	--	9.3	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	17.1	--	--	--	7.5	--	10.6	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	18.9	--	12.5	--	--	8.3	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	16.7	--	12.9	--	--	11.9	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	14.8	--	2.4	--	--	12.6	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	18.3	--	--	--	--	10.4	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	18.4	--	--	--	--	11.3	--
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.7	--
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.1	--
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.0	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																			
IO-10	OU-3 Community Road	130	96	43	104	73	159	90	107	--	85	157	--	227	--	218	206	145	150
MW-34S	OU-3 Community Road	-124	-122	-108	-72	-84	-105	-150	-105	-102	-238	-75	-138	-112	-96	-118	-29	5	--
MW-34I	OU-3 Community Road	-39	-61	-49	60	50	26	167	175	225	-213	183	-81	209	208	170	220	186	--
MW-34D	OU-3 Community Road	193	167	-23	113	70	140	185	135	261	-234	197	-76	201	210	129	193	190	--
MW-46WR	OU-3 Community Road	-38	-18	11	59	58	38	-11	-27	8	-71	-7	--	-18	26	88	43	66	--
MW-70/70S	OU-3 Community Road	-42	-42	-6	51	-28	-39	-29	-32	--	-78	-8	--	36	68	44	37	71	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	137	--	401	--	--	183	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	113	--	186	--	--	99	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	-60	--	--	1	--	--	-36	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	-117	--	--	30	--	--	-6	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	-142	--	-140	--	--	-33	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	-63	--	-89	--	--	38	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	122	--	111	--	--	206	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2008		2009												2010			
		Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	90	--	--	--	--	109
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	89	--	--	--	--	136
OU3MW-07S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-139
OU3MW-07I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-56
OU3MW-07I2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3

Summary of Groundwater Parameter Data

OU-3 Oxygen Injection System

Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report

Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2010										2011						
		Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11
pH (SU)																		
IO-10	OU-3 Community Road	6.65	5.89	6.58	6.02	6.09	5.63	5.67	5.21	7.04	--	7.34	6.51	8.0	7.11	6.50	6.68	7.13
MW-34S	OU-3 Community Road	6.01	5.79	6.05	5.80	6.24	5.69	5.65	6.55	7.98	5.82	6.66	ER	7.34	5.74	6.57	6.18	6.58
MW-34I	OU-3 Community Road	6.33	5.92	6.24	6.15	5.75	5.71	5.73	5.01	5.50	5.62	6.38	ER	7.80	6.05	6.74	6.34	6.77
MW-34D	OU-3 Community Road	6.07	5.66	5.93	5.88	5.40	5.76	5.69	6.48	5.63	5.82	6.48	4.54	6.21	6.65	5.99	5.44	6.15
MW-46WR	OU-3 Community Road	5.82	5.60	5.89	5.84	6.00	6.00	5.86	5.17	5.83	--	6.66	5.28	7.46	7.55	7.54	6.16	6.46
MW-70/70S	OU-3 Community Road	5.87	4.78	5.82	6.01	5.95	5.64	5.63	6.10	8.90	5.82	6.64	6.55	7.73	5.54	8.06	6.43	6.62
OU3MW-02S	OU-3 Community Road	--	5.81	--	5.72	--	--	--	--	5.98	--	--	5.92	--	5.05	5.54	5.71	6.19
OU3MW-02I	OU-3 Community Road	--	6.08	--	5.70	--	--	--	--	5.32	--	--	5.65	--	5.10	5.02	5.74	5.93
OU3MW-03S	OU-3 Community Road	5.64	--	--	5.97	--	--	--	--	7.26	--	--	5.34	--	5.50	7.64	6.18	6.52
OU3MW-03I	OU-3 Community Road	5.89	--	--	6.12	--	--	--	--	5.39	--	--	4.84	--	4.90	5.74	5.97	6.40
OU3MW-04S	OU-3 Community Road	5.78	--	--	5.79	--	--	--	--	6.64	--	--	5.64	--	5.24	7.41	6.02	6.39
OU3MW-04I	OU-3 Community Road	5.86	--	--	6.07	--	--	--	--	6.47	--	--	5.08	--	5.05	5.70	5.64	6.08
OU3MW-04D	OU-3 Community Road	5.74	--	--	5.71	--	--	--	--	6.51	--	--	5.17	--	5.14	5.61	5.79	6.12
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	5.71	--	--	6.21	--	--	5.59	--	--	5.58	--	6.84	6.19	6.63	6.62
OU3MW-05I	OU-3 Community Road	--	--	5.18	--	--	5.69	--	--	5.47	--	--	4.98	--	5.72	5.62	5.78	6.22
OU3MW-07S	OU-3 Community Road	5.79	5.99	5.90	5.48	6.32	5.52	5.32	4.84	4.88	5.13	5.48	5.50	4.88	5.13	5.92	5.27	5.74
OU3MW-07I	OU-3 Community Road	5.92	5.86	6.02	5.64	5.80	5.78	5.80	6.37	4.76	6.17	6.31	6.31	5.53	6.35	6.32	6.03	6.52
OU3MW-07I2	OU-3 Community Road	5.65	5.63	5.94	5.59	5.83	5.71	5.59	5.26	5.43	5.93	6.35	6.35	5.76	7.12	6.40	6.46	6.79
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.495	0.316	0.239	0.310	0.341	0.198	0.209	0.207	0.223	--	0.544	1.490	0.573	0.900	0.432	0.447	0.460
MW-34S	OU-3 Community Road	0.680	0.826	0.398	0.542	0.668	0.680	0.674	0.563	0.387	0.783	0.667	0.490	0.481	0.537	0.447	0.920	0.503
MW-34I	OU-3 Community Road	0.319	0.363	0.266	0.239	0.216	0.354	0.258	0.209	0.273	0.261	0.255	1.100	1.290	0.299	0.591	0.999	0.387
MW-34D	OU-3 Community Road	0.289	0.305	0.248	0.285	0.294	0.336	0.268	0.255	0.375	0.320	0.251	0.782	0.261	0.759	0.291	0.925	0.257
MW-46WR	OU-3 Community Road	0.624	0.382	0.519	0.340	0.333	0.296	0.246	0.280	0.497	--	0.739	3.670	1.210	1.050	0.664	1.500	0.700
MW-70/70S	OU-3 Community Road	1.380	0.573	0.456	0.398	0.291	0.260	0.307	0.321	0.330	0.401	0.462	0.340	0.433	0.598	0.576	0.503	0.413
OU3MW-02S	OU-3 Community Road	--	0.536	--	0.274	--	--	--	--	0.453	--	--	0.818	--	0.597	0.391	1.230	0.501
OU3MW-02I	OU-3 Community Road	--	0.191	--	0.141	--	--	--	--	0.250	--	--	0.358	--	0.200	0.340	0.332	0.264
OU3MW-03S	OU-3 Community Road	0.820	--	--	0.520	--	--	--	--	0.413	--	--	0.998	--	0.359	0.535	0.685	0.620
OU3MW-03I	OU-3 Community Road	0.310	--	--	0.420	--	--	--	--	0.380	--	--	0.335	--	0.000	0.526	0.522	0.412
OU3MW-04S	OU-3 Community Road	0.403	--	--	0.395	--	--	--	--	0.526	--	--	1.38	--	0.821	0.659	0.867	0.718
OU3MW-04I	OU-3 Community Road	0.256	--	--	0.448	--	--	--	--	0.343	--	--	0.488	--	0.226	0.385	0.541	0.681
OU3MW-04D	OU-3 Community Road	0.750	--	--	0.300	--	--	--	--	0.333	--	--	0.517	--	0.185	0.278	0.333	0.266
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	0.425	--	--	0.548	--	--	0.538	--	--	0.700	--	--	0.640	0.990	0.389
OU3MW-05I	OU-3 Community Road	--	--	0.342	--	--	0.363	--	--	0.286	--	--	0.464	--	--	0.382	0.677	0.480
OU3MW-07S	OU-3 Community Road	0.284	0.516	0.591	0.412	0.432	0.390	0.361	0.327	0.473	0.486	0.362	0.380	0.269	0.499	0.320	0.370	0.327
OU3MW-07I	OU-3 Community Road	0.335	0.357	0.359	0.270	0.241	0.200	0.187	0.172	0.183	0.368	0.377	0.417	0.252	0.347	0.322	0.343	0.321
OU3MW-07I2	OU-3 Community Road	0.278	0.346	0.353	0.261	0.316	0.258	0.211	0.194	0.254	0.274	0.244	0.418	0.323	0.466	0.369	0.427	0.368
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	11.0	6.0	26.0	5.0	0.8	9.0	2.0	0.0	0.0	--	0.0	1.0	0.0	0.0	0.0	0.0	0.0
MW-34S	OU-3 Community Road	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	3.0	0.0	1.0	0.0	0.0	0.0
MW-34I	OU-3 Community Road	1.9	0.0	0.4	0.0	0.0	6.0	17.0	10.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-34D	OU-3 Community Road	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	0.0	0.0	0.0
MW-46WR	OU-3 Community Road	5.0	1.0	6.0	0.0	0.0	1.5	0.0	0.0	0.0	--	0.0	1.0	0.0	0.0	0.0	0.0	0.0
MW-70/70S	OU-3 Community Road	6.0	6.0	6.0	7.8	1.2	0.0	0.0	0.0	1.0	0.0	0.0	1.4	0.0	5.0	0.0	0.0	0.0
OU3MW-02S	OU-3 Community Road	--	29.0	--	28.0	--	--	--	--	25.0	--	--	23.0	--	18.5	20.0	24.0	24.0

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Well ID	Oxygen Injection System	2010										2011							
		Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	
OU3MW-02I	OU-3 Community Road	--	26.0	--	19.0	--	--	--	--	20.0	--	--	21.0	--	42.0	40.0	31.0	18.2	
OU3MW-03S	OU-3 Community Road	0.6	--	--	3.7	--	--	--	--	0.0	--	--	0.0	--	0.0	0.0	0.0	0.4	
OU3MW-03I	OU-3 Community Road	3.8	--	--	2.0	--	--	--	--	0.0	--	--	5.1	--	11.0	0.0	0.0	0.4	
OU3MW-04S	OU-3 Community Road	0.0	--	--	1.5	--	--	--	--	0.0	--	--	0.0	--	9.7	0.0	0.0	0.4	
OU3MW-04I	OU-3 Community Road	0.0	--	--	1.3	--	--	--	--	8.8	--	--	26.0	--	2.2	0.0	0.0	0.1	
OU3MW-04D	OU-3 Community Road	0.0	--	--	1.9	--	--	--	--	0.0	--	--	0.0	--	0.0	0.0	0.0	0.0	
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-05S	OU-3 Community Road	--	--	12.7	--	--	4.9	--	--	0.0	--	--	0.8	--	--	0.0	0.0	1.7	
OU3MW-05I	OU-3 Community Road	--	--	0.0	--	--	21.0	--	--	15.4	--	--	14.3	--	--	0.0	1.8	10.6	
OU3MW-07S	OU-3 Community Road	3.4	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	4.0	7.0	1.1	1.0	5.0		
OU3MW-07I	OU-3 Community Road	3.8	27.0	27.0	28.0	28.0	28.0	28.0	24.0	22.0	10.0	9.0	1.0	6.0	6.0	18.7	25.0	28.0	
OU3MW-07I2	OU-3 Community Road	3.7	3.0	5.0	8.0	6.0	7.0	8.0	10.0	7.7	3.0	0.0	1.0	1.0	0.0	0.0	2.6	4.0	
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Temperature (degrees Celcius)																			
IO-10	OU-3 Community Road	12.7	16.0	16.8	19.9	18.9	19.4	18.6	16.4	14.0	--	11.0	11.1	12.0	15.2	16.1	18.4	18.9	
MW-34S	OU-3 Community Road	11.5	15.9	17.6	21.3	22.7	21.8	19.8	16.4	11.0	7.7	7.0	12.3	11.6	13.5	16.3	19.3	20.4	
MW-34I	OU-3 Community Road	11.8	15.6	14.7	17.5	17.9	19.1	18.1	17.3	14.3	13.0	12.2	12.7	11.5	13.6	12.7	15.9	16.2	
MW-34D	OU-3 Community Road	13.3	14.6	14.6	16.4	16.7	17.3	16.7	15.6	14.6	13.9	12.8	13.1	12.9	11.9	13.2	15.6	15.5	
MW-46WR	OU-3 Community Road	13.8	19.0	23.0	26.2	24.0	21.6	19.4	16.3	12.1	--	7.0	10.1	13.7	17.5	20.4	23.9	25.0	
MW-70/70S	OU-3 Community Road	11.3	21.2	22.0	23.7	22.0	20.4	20.4	12.6	10.1	9.1	7.8	13.0	11.5	17.5	16.6	19.5	22.5	
OU3MW-02S	OU-3 Community Road	--	5.2	--	21.8	--	--	--	--	11.5	--	--	9.2	--	13.0	18.4	21.8	22.0	
OU3MW-02I	OU-3 Community Road	--	13.1	--	17.9	--	--	--	--	12.2	--	--	11.3	--	12.0	15.0	17.1	18.2	
OU3MW-03S	OU-3 Community Road	13.2	--	--	20.4	--	--	--	--	12.0	--	--	9.1	--	13.7	18.6	20.1	21.6	
OU3MW-03I	OU-3 Community Road	13.1	--	--	17.8	--	--	--	--	14.5	--	--	13.5	--	16.6	16.4	16.6	18.8	
OU3MW-04S	OU-3 Community Road	12.7	--	--	21.2	--	--	--	--	13.5	--	--	9.4	--	12.3	17.7	19.7	21.4	
OU3MW-04I	OU-3 Community Road	12.6	--	--	17.3	--	--	--	--	15.0	--	--	12.1	--	17.1	15.2	16.6	18.1	
OU3MW-04D	OU-3 Community Road	13.5	--	--	18.1	--	--	--	--	13.5	--	--	13.6	--	14.9	16.3	16.7	17.2	
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-05S	OU-3 Community Road	--	--	18.2	--	--	20.5	--	--	8.2	--	--	8.6	--	--	18.6	20.2	20.2	
OU3MW-05I	OU-3 Community Road	--	--	17.0	--	--	18.1	--	--	12.0	--	--	10.9	--	--	15.4	16.4	16.0	
OU3MW-07S	OU-3 Community Road	11.9	15.7	17.7	19.8	22.0	20.0	18.1	15.0	12.1	8.1	7.5	8.8	11.7	14.1	17.1	20.2	21.0	
OU3MW-07I	OU-3 Community Road	12.7	14.9	16.8	17.4	18.9	18.7	17.6	15.3	12.2	11.4	10.3	9.7	12.7	14.3	16.1	17.0	18.6	
OU3MW-07I2	OU-3 Community Road	13.1	14.8	15.8	17.6	18.6	17.6	17.0	15.5	14.7	11.4	11.8	11.9	13.5	14.5	14.8	15.9	17.7	
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Oxidation Reduction Potential (mV)																			
IO-10	OU-3 Community Road	57	92	68	225	164	220	217	85	53	--	-123	-160	-121	-101	-117	-129	-146	
MW-34S	OU-3 Community Road	-88	-96	-172	-147	-122	3	-59	-120	-20	-68	-66	52	-103	-19	-138	-104	-71	
MW-34I	OU-3 Community Road	81	121	-24	200	177	217	207	100	180	58	67	-78	-117	220	-90	-99	-99	
MW-34D	OU-3 Community Road	47	84	-47	221	208	220	219	96	98	94	181	259	118	-145	118	115	73	
MW-46WR	OU-3 Community Road	-37	-75	-71	-118	-116	-106	-110	-47	-62	--	-130	-93	-190	-100	-170	-169	-147	
MW-70/70S	OU-3 Community Road	-40	29	-88	-31	-62	-7	-45	-74	-74	-151	-98	-34	-144	-107	-177	-145	-137	
OU3MW-02S	OU-3 Community Road	--	210	--	239	--	--	--	--	136	--	--	91	--	136	168	125	99	
OU3MW-02I	OU-3 Community Road	--	210	--	260	--	--	--	--	214	--	--	168	--	230	220	161	117	
OU3MW-03S	OU-3 Community Road	-30	--	--	-51	--	--	--	--	35	--	--	46	--	20	-137	-108	-76	
OU3MW-03I	OU-3 Community Road	-45	--	--	-113	--	--	--	--	33	--	--	116	--	35	-130	-139	-134	
OU3MW-04S	OU-3 Community Road	-55	--	--	-100	--	--	--	--	-135	--	--	48	--	-10	-95	-79	-30	
OU3MW-04I	OU-3 Community Road	-34	--	--	-119	--	--	--	--	-9	--	--	149	--	114	-45	18	-24	
OU3MW-04D	OU-3 Community Road	213	--	--	216	--	--	--	--	182	--	--	165	--	130	102	125	139	
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
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Well ID	Oxygen Injection System	2010										2011							
		Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	
OU3MW-05S	OU-3 Community Road	--	--	114	--	--	131	--	--	147	--	--	141	--	--	-6	32	71	
OU3MW-05I	OU-3 Community Road	--	--	100	--	--	115	--	--	164	--	--	210	--	--	30	60	96	
OU3MW-07S	OU-3 Community Road	-107	-109	-40	-66	-121	-5	11	53	69	50	-18	8	134	77	-48	27	51	
OU3MW-07I	OU-3 Community Road	43	190	148	198	172	165	193	172	220	158	102	-35	97	84	64	65	71	
OU3MW-07I2	OU-3 Community Road	42	152	133	142	129	134	192	81	93	131	58	-58	-20	-38	-77	-39	-51	
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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Well ID	Oxygen Injection System	2011				2012											
		Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
pH (SU)																	
IO-10	OU-3 Community Road	6.23	7.02	6.85	6.68	7.18	6.86	6.60	6.61	6.66	6.23	--	6.10	5.89	6.14	5.17	5.99
MW-34S	OU-3 Community Road	5.72	6.55	6.47	6.21	6.62	6.72	6.22	6.39	6.25	6.21	6.11	6.47	6.56	6.02	4.42	5.93
MW-34I	OU-3 Community Road	8.50	6.87	6.76	6.58	6.93	6.91	6.58	6.56	6.51	6.54	6.28	6.42	6.09	6.38	4.46	5.88
MW-34D	OU-3 Community Road	6.47	6.14	6.03	5.80	6.18	6.12	5.58	5.95	6.05	6.05	6.06	6.24	7.05	6.17	4.05	5.92
MW-46WR	OU-3 Community Road	5.74	6.28	6.12	5.91	6.70	6.64	6.03	6.31	6.13	5.94	5.84	6.09	6.99	5.88	5.84	5.82
MW-70/70S	OU-3 Community Road	5.87	5.71	6.41	6.24	6.92	6.61	6.19	6.48	6.37	6.30	6.22	6.37	7.49	6.02	6.08	5.92
OU3MW-02S	OU-3 Community Road	5.55	5.40	--	--	5.96	--	--	5.95	--	--	5.96	--	--	5.87	--	--
OU3MW-02I	OU-3 Community Road	5.49	5.25	--	--	5.09	--	--	4.91	--	--	5.79	--	--	5.85	--	--
OU3MW-03S	OU-3 Community Road	7.40	5.90	6.65	6.38	6.36	--	--	5.65	6.39	6.33	6.30	6.32	7.66	6.32	--	--
OU3MW-03I	OU-3 Community Road	7.42	5.76	6.35	6.24	5.57	--	--	5.84	6.14	6.08	6.21	6.39	7.53	6.07	5.98	5.70
OU3MW-04S	OU-3 Community Road	7.16	5.66	6.32	6.17	5.47	6.36	--	6.48	--	--	5.92	--	--	6.08	--	--
OU3MW-04I	OU-3 Community Road	5.47	5.37	5.92	5.79	5.29	6.06	--	6.51	6.29	6.19	5.68	--	--	6.04	--	--
OU3MW-04D	OU-3 Community Road	5.33	5.25	5.92	5.95	5.29	6.05	--	6.33	6.18	6.07	5.86	5.73	6.87	6.38	5.94	6.11
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	6.29	--	6.38	--	--	6.30	--	6.26	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	6.35	--	3.13	--	--	5.04	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	5.83	--	6.49	--	6.31	--	--	6.25	--	--	6.33	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	5.06	--	5.14	--	5.81	--	--	5.94	--	--	5.96	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	5.05	5.87	5.84	5.71	5.88	5.78	5.08	5.83	5.94	--	5.64	5.81	5.95	--	--	--
OU3MW-07I	OU-3 Community Road	6.65	6.53	6.55	6.53	6.38	6.22	5.73	6.45	6.03	6.31	6.41	6.20	5.80	--	--	--
OU3MW-07I2	OU-3 Community Road	7.47	6.99	6.73	6.71	6.93	6.84	6.41	6.51	6.03	6.17	6.35	5.85	6.03	--	--	--
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	6.92	--	6.85	6.49	5.85	6.55	5.83	6.06	--	--	--
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	6.39	--	6.11	--	--	5.87	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Conductivity (mS/cm)																	
IO-10	OU-3 Community Road	0.510	0.421	0.424	0.496	0.432	0.485	0.417	0.485	0.510	0.459	--	0.360	0.342	1.170	1.070	0.525
MW-34S	OU-3 Community Road	1.100	0.808	0.484	0.444	0.394	0.411	0.595	0.642	0.472	0.508	0.558	0.442	0.289	0.613	1.370	0.681
MW-34I	OU-3 Community Road	0.450	0.375	0.385	0.416	0.425	0.428	0.362	0.441	0.470	0.472	0.497	0.368	0.341	0.405	0.936	0.442
MW-34D	OU-3 Community Road	0.380	0.299	0.323	0.330	0.298	0.317	0.302	0.336	0.340	0.320	0.363	0.306	0.306	0.495	0.867	0.431
MW-46WR	OU-3 Community Road	0.869	0.570	0.417	0.401	0.695	0.093	0.619	0.667	0.700	0.588	0.452	0.461	0.447	0.652	0.669	0.700
MW-70/70S	OU-3 Community Road	0.501	0.571	0.388	0.345	0.374	0.385	0.374	0.422	0.425	0.410	0.403	0.427	0.464	1.550	0.618	0.658
OU3MW-02S	OU-3 Community Road	0.405	0.500	--	--	0.343	--	--	0.436	--	--	0.293	--	--	0.293	--	--
OU3MW-02I	OU-3 Community Road	0.337	0.321	--	--	0.199	--	--	0.158	--	--	0.185	--	--	0.188	--	--
OU3MW-03S	OU-3 Community Road	0.785	0.951	0.640	0.699	0.714	--	--	0.649	0.452	0.516	0.503	0.283	0.443	0.617	--	--
OU3MW-03I	OU-3 Community Road	0.462	0.610	0.445	0.492	0.517	--	--	0.386	0.380	0.401	0.450	0.411	0.405	0.473	0.430	0.473
OU3MW-04S	OU-3 Community Road	0.672	0.861	0.834	0.678	0.813	0.780	--	0.732	--	--	0.552	--	--	0.754	--	--
OU3MW-04I	OU-3 Community Road	1.080	1.200	0.386	0.366	0.453	0.408	--	0.443	0.417	0.413	0.540	--	--	0.414	--	--
OU3MW-04D	OU-3 Community Road	0.363	0.434	0.353	0.353	0.410	0.324	--	0.305	0.287	0.289	0.900	0.299	0.309	0.377	0.367	0.389
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	0.366	--	0.332	--	--	0.946	--	0.278	0.362	0.388	0.430
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	0.346	--	0.350	--	--	0.478	--	--	0.344	--	--
OU3MW-05S	OU-3 Community Road	0.924	--	0.543	--	0.562	--	--	0.587	--	--	0.627	--	--	0.532	--	--
OU3MW-05I	OU-3 Community Road	0.576	--	0.701	--	0.346	--	--	0.401	--	--	0.365	--	--	0.301	--	--
OU3MW-07S	OU-3 Community Road	0.423	0.319	0.343	0.341	0.353	0.358	0.439	0.322	0.342	--	0.327	0.276	0.348	0.339	0.353	0.346
OU3MW-07I	OU-3 Community Road	0.347	0.350	0.394	0.414	0.376	0.416	0.531	0.373	0.371	0.370	0.406	0.347	0.350	0.457	0.449	0.467
OU3MW-07I2	OU-3 Community Road	0.397	0.391	0.436	0.451	0.456	0.447	0.414	0.387	0.383	0.410	0.322	0.292	0.299	0.445	0.466	0.401
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	0.439	--	0.363	0.319	0.369	0.315	0.260	0.348	0.347	0.368	0.360
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	0.352	--	0.365	--	--	0.313	--	--	0.359	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)																	
IO-10	OU-3 Community Road	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	31.0	28.0	31.8	1.0	1.3
MW-34S	OU-3 Community Road	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0	0.7
MW-34I	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	24.0	32.0	5.9	0.6
MW-34D	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	1.0	0.0
MW-46WR	OU-3 Community Road	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.6	0.0
MW-70/70S	OU-3 Community Road	2.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	1.1
OU3MW-02S	OU-3 Community Road	30.0	24.0	--	--	23.0	--	--	28.0	--	--	25.0	--	--	14.2	--	--

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Well ID	Oxygen Injection System	2011				2012											
		Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
OU3MW-02I	OU-3 Community Road	39.0	28.0	--	--	30.0	--	--	32.0	--	--	16.6	--	--	17.0	--	--
OU3MW-03S	OU-3 Community Road	0.4	2.1	2.4	3.2	0.0	--	--	0.8	0.0	0.0	0.0	0.0	0.0	0.0	--	--
OU3MW-03I	OU-3 Community Road	0.3	2.1	2.4	3.2	2.4	--	--	5.3	0.0	0.0	2.9	0.0	0.0	0.5	0.0	3.2
OU3MW-04S	OU-3 Community Road	0.7	2.2	2.5	3.0	2.6	0.0	--	0.0	--	--	0.0	--	--	0.6	--	--
OU3MW-04I	OU-3 Community Road	2.6	2.6	9.6	14.6	16.5	20.0	--	24.0	24.0	24.0	24.0	--	--	32.0	--	--
OU3MW-04D	OU-3 Community Road	2.4	1.7	2.1	2.8	2.4	0.0	--	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.1
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	0.0	--	0.0	--	--	0.0	--	0.0	0.5	1.6	1.2
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	0.0	--	0.5	--	--	0.4	--	--	0.4	--	--
OU3MW-05S	OU-3 Community Road	1.9	--	3.9	--	0.1	--	--	0.0	--	--	2.3	--	--	0.0	--	--
OU3MW-05I	OU-3 Community Road	6.5	--	4.8	--	20.0	--	--	23.0	--	--	0.0	--	--	7.7	--	--
OU3MW-07S	OU-3 Community Road	11.0	10.0	8.6	10.0	11.0	20.0	20.0	22.0	29.0	--	24.0	20.0	21.0	21.0	22.0	25.0
OU3MW-07I	OU-3 Community Road	26.0	27.0	23.0	21.0	23.0	20.0	34.0	30.0	18.0	30.0	14.5	35.0	34.0	--	38.0	32.0
OU3MW-07I2	OU-3 Community Road	2.0	2.0	2.0	4.0	5.0	5.2	4.0	12.0	33.0	28.0	33.0	25.0	20.0	--	41.0	32.0
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	0.0	--	9.3	28.0	19.0	23.0	23.0	22.0	--	32.0	29.0
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	0.0	--	0.0	--	--	0.0	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Temperature (degrees Celcius)																	
IO-10	OU-3 Community Road	19.2	18.7	17.3	14.7	12.4	12.2	13.2	14.7	16.0	17.4	--	19.10	20.10	20.1	17.0	15.5
MW-34S	OU-3 Community Road	20.1	19.5	17.1	13.8	10.6	10.5	12.7	14.9	16.4	17.6	20.35	20.40	21.90	20.3	16.9	14.1
MW-34I	OU-3 Community Road	17.5	17.4	17.3	15.4	13.4	13.2	13.5	14.4	15.2	16.0	16.32	17.20	17.30	19.2	17.6	15.8
MW-34D	OU-3 Community Road	15.8	16.2	15.8	14.9	13.7	13.5	13.7	15.2	16.3	16.0	16.20	15.60	16.30	16.0	15.3	15.2
MW-46WR	OU-3 Community Road	22.5	21.4	16.9	13.3	10.2	10.8	14.0	17.1	18.8	22.5	25.00	24.70	24.70	18.8	15.7	11.4
MW-7070S	OU-3 Community Road	20.8	19.4	17.1	13.1	10.2	10.8	12.3	14.9	16.5	18.2	20.10	20.90	22.30	21.2	15.3	13.8
OU3MW-02S	OU-3 Community Road	19.5	18.4	--	--	9.6	--	--	11.7	--	--	21.11	--	--	17.9	--	--
OU3MW-02I	OU-3 Community Road	16.3	16.1	--	--	12.8	--	--	12.2	--	--	16.84	--	--	16.6	--	--
OU3MW-03S	OU-3 Community Road	14.3	20.0	16.0	13.1	11.2	--	--	13.2	16.0	18.3	22.53	22.00	21.60	20.4	--	--
OU3MW-03I	OU-3 Community Road	16.7	18.0	16.6	15.1	13.8	--	--	12.3	15.8	16.7	17.30	18.50	19.20	18.1	16.2	14.4
OU3MW-04S	OU-3 Community Road	19.7	18.8	15.6	13.6	11.7	10.0	--	12.1	--	--	20.40	--	--	19.3	--	--
OU3MW-04I	OU-3 Community Road	17.1	16.6	16.2	14.4	14.1	12.5	--	13.0	15.6	16.6	17.51	--	--	17.6	--	--
OU3MW-04D	OU-3 Community Road	15.1	15.6	15.6	14.4	13.3	13.9	--	13.7	16.1	17.3	17.80	16.70	17.20	16.6	14.3	14.5
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	13.8	--	13.5	--	--	17.37	--	16.10	15.4	13.7	14.2
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	13.5	--	13.6	--	--	20.17	--	--	14.8	--	--
OU3MW-05S	OU-3 Community Road	19.2	--	13.1	--	11.9	--	--	14.3	--	--	23.00	--	--	18.2	--	--
OU3MW-05I	OU-3 Community Road	16.4	--	13.9	--	14.5	--	--	15.3	--	--	20.56	--	--	17.3	--	--
OU3MW-07S	OU-3 Community Road	19.1	19.8	14.9	13.9	10.4	9.8	11.5	15.9	18.2	--	21.71	21.50	20.13	19.7	14.8	10.6
OU3MW-07I	OU-3 Community Road	16.5	17.9	15.0	14.6	12.6	11.9	12.6	15.3	16.7	17.7	18.68	19.30	18.70	19.9	14.4	15.2
OU3MW-07I2	OU-3 Community Road	15.2	16.5	14.6	14.2	12.3	12.3	13.6	15.4	17.1	20.6	18.59	17.70	19.20	18.2	14.6	12.7
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	12.1	--	12.7	16.5	19.3	18.13	17.80	16.19	17.2	14.4	11.7
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	12.4	--	12.5	--	--	18.81	--	--	16.5	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxidation Reduction Potential (mV)																	
IO-10	OU-3 Community Road	-110	-152	-144	-137	-111	-102	-98	-108	-120	-86	--	106	166	119	249	248
MW-34S	OU-3 Community Road	-84	40	35	36	-53	-79	-88	-57	-126	-67	-163	23	-85	371	7	
MW-34I	OU-3 Community Road	-94	-116	-109	-124	-85	-71	-93	-88	-121	-127	-61	-103	75	120	382	123
MW-34D	OU-3 Community Road	52	-126	-119	-96	45	44	-57	1	-3	-35	39	-86	-79	-91	175	93
MW-46WR	OU-3 Community Road	-100	-231	-188	-116	-107	-91	-161	-94	-89	-173	-184	-182	-172	-104	-11	0
MW-7070S	OU-3 Community Road	-110	-113	-163	-124	-107	-79	-125	-88	-107	-181	-204	-205	-191	-65	-29	31
OU3MW-02S	OU-3 Community Road	153	270	--	--	209	--	--	213	--	--	225	--	--	181	--	--
OU3MW-02I	OU-3 Community Road	194	178	--	--	348	--	--	248	--	--	377	--	--	293	--	--
OU3MW-03S	OU-3 Community Road	-142	-81	-136	-126	-99	--	--	-19	-69	-159	-118	-153	-141	-91	--	--
OU3MW-03I	OU-3 Community Road	-153	-72	-124	-96	-57	--	--	-34	-70	-208	-62	-196	-161	-56	-42	320
OU3MW-04S	OU-3 Community Road	-107	95	46	44	34	-40	--	-51	--	--	-230	--	--	-45	--	--
OU3MW-04I	OU-3 Community Road	15	2	-11	31	131	70	--	158	67	68	129	--	--	118	--	--
OU3MW-04D	OU-3 Community Road	92	18	-133	-57	121	65	--	27	97	42	-50	-8	-43	36	236	266
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	28	--	64	--	--	107	--	41	82	273	290
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	2	--	125	--	--	17	--	--	175	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2011				2012											
		Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
OU3MW-05S	OU-3 Community Road	47	--	167	--	106	--	--	44	--	--	18	--	--	39	--	--
OU3MW-05I	OU-3 Community Road	143	--	126	--	164	--	--	128	--	--	110	--	--	114	--	--
OU3MW-07S	OU-3 Community Road	64	-76	-70	-74	23	62	232	101	23	--	105	-17	54	46	402	108
OU3MW-07I	OU-3 Community Road	67	30	-2	7	183	160	308	211	256	175	222	150	158	--	436	445
OU3MW-07I2	OU-3 Community Road	-72	77	106	121	-42	-35	-26	24	67	228	208	162	158	--	446	231
OU3MW-07I3	OU-3 Community Road	--	--	--	--	--	-47	--	49	179	187	172	163	206	--	445	209
OU3MW-07I4	OU-3 Community Road	--	--	--	--	--	-22	--	139	--	--	190	--	--	--	--	--
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3

Summary of Groundwater Parameter Data

OU-3 Oxygen Injection System

Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report

Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2013												2014				
		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
pH (SU)																		
IO-10	OU-3 Community Road	6.11	6.67	6.32	6.42	6.17	6.33	6.04	--	6.13	5.96	5.60	5.71	5.86	6.28	6.19	6.19	5.91
MW-34S	OU-3 Community Road	5.88	5.82	5.75	6.14	--	5.89	5.88	5.88	5.78	5.77	5.42	5.80	5.52	7.88	5.88	6.01	5.95
MW-34I	OU-3 Community Road	5.87	5.65	5.65	6.45	6.05	6.24	6.24	6.30	6.15	6.14	5.79	5.90	5.64	7.52	5.91	6.20	6.15
MW-34D	OU-3 Community Road	5.86	6.45	6.37	6.11	5.66	5.78	5.68	5.84	5.79	5.82	5.50	5.63	5.55	8.25	5.69	6.03	5.95
MW-46WR	OU-3 Community Road	5.77	6.48	5.78	5.48	5.69	5.46	5.67	--	5.58	5.69	5.35	5.51	5.42	5.54	6.07	5.71	5.53
MW-70/70S	OU-3 Community Road	5.82	6.55	5.89	6.01	5.84	5.74	5.68	--	5.82	5.73	5.39	5.49	5.57	5.96	7.30	5.79	5.63
OU3MW-02S	OU-3 Community Road	5.58	--	6.22	--	--	--	--	--	--	--	--	5.49	--	--	6.46	5.62	--
OU3MW-02I	OU-3 Community Road	5.73	--	6.11	--	--	--	--	--	--	--	--	5.40	--	--	5.97	5.71	--
OU3MW-03S	OU-3 Community Road	--	--	6.28	6.38	--	6.12	5.98	6.12	6.02	--	--	5.69	--	--	6.06	5.81	--
OU3MW-03I	OU-3 Community Road	5.69	5.92	6.27	6.06	5.87	5.70	--	6.06	5.70	5.88	5.91	5.85	5.79	5.94	6.33	5.88	--
OU3MW-04S	OU-3 Community Road	5.77	--	6.20	--	--	5.94	5.90	6.18	--	--	--	5.62	--	5.65	--	5.84	--
OU3MW-04I	OU-3 Community Road	6.06	--	6.11	--	--	6.16	5.92	6.17	6.08	6.06	--	5.72	--	5.78	--	5.85	--
OU3MW-04D	OU-3 Community Road	6.08	6.15	6.39	6.53	6.04	5.90	5.87	5.98	5.82	5.82	--	5.52	--	5.59	--	5.76	--
OU3MW-04D2	OU-3 Community Road	5.95	6.19	6.30	6.23	5.94	6.05	--	5.88	--	--	--	5.51	--	6.68	--	5.83	--
OU3MW-04D3	OU-3 Community Road	--	--	5.87	--	--	--	--	--	--	--	--	5.65	--	6.78	--	5.84	--
OU3MW-05S	OU-3 Community Road	--	6.38	6.61	6.16	--	5.86	6.06	--	--	--	5.57	--	--	--	5.80	6.20	--
OU3MW-05I	OU-3 Community Road	--	6.99	6.13	5.94	5.91	5.89	5.95	5.94	--	--	5.41	5.63	5.58	5.64	6.05	5.71	--
OU3MW-07S	OU-3 Community Road	5.62	6.47	6.10	6.03	--	5.54	5.690	--	5.83	5.87	5.66	5.53	5.57	7.04	5.60	5.84	5.88
OU3MW-07I	OU-3 Community Road	6.12	7.17	6.40	6.31	6.14	6.20	6.09	6.34	6.13	6.07	5.93	5.99	5.84	6.72	6.09	6.07	5.87
OU3MW-07I2	OU-3 Community Road	5.75	6.09	6.34	6.31	6.16	6.11	6.19	6.38	6.18	6.03	5.77	5.78	5.62	6.04	5.95	5.85	6.07
OU3MW-07I3	OU-3 Community Road	5.79	6.63	6.08	--	6.15	5.86	5.98	5.97	5.89	5.80	5.62	6.11	5.68	6.20	6.09	5.99	5.74
OU3MW-07I4	OU-3 Community Road	5.69	--	--	6.430	--	--	--	--	--	--	--	5.55	5.53	--	--	--	5.53
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	6.22	6.06	5.93	5.98	5.90	6.02	5.55	5.87	5.43
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	6.73	6.37	6.24	6.18	5.69	6.12	5.67	6.14	6.03
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	5.95	5.83	5.59	5.59	5.72	6.10	5.76	6.06	5.49
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	5.90	5.83	5.52	5.65	5.29	5.33	5.51	5.51	5.12
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	6.62	6.54	6.21	6.59	5.72	5.92	6.31	6.22	5.88
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	5.89	5.74	5.49	5.87	5.51	5.70	5.68	5.76	5.69
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.493	0.482	0.632	0.460	0.526	0.457	0.414	--	0.517	0.399	0.578	0.518	0.384	0.411	0.444	0.334	0.491
MW-34S	OU-3 Community Road	0.605	0.659	0.682	0.558	--	0.556	0.523	0.576	0.556	0.448	0.847	1.030	1.100	1.240	0.642	0.589	0.540
MW-34I	OU-3 Community Road	0.383	0.434	0.472	0.446	0.534	0.474	0.427	0.416	0.517	0.506	0.486	0.327	0.382	0.373	0.351	0.545	0.650
MW-34D	OU-3 Community Road	0.329	0.369	0.381	6.110	5.660	5.780	0.418	0.411	0.432	0.365	0.568	0.373	0.391	0.336	0.281	0.308	0.315
MW-46WR	OU-3 Community Road	0.670	0.564	0.766	0.745	0.686	0.516	0.845	--	0.583	0.678	0.745	0.566	0.680	1.190	0.938	1.970	1.140
MW-70/70S	OU-3 Community Road	0.510	0.506	0.700	0.482	0.556	0.520	0.468	--	0.503	0.417	0.699	0.650	0.447	0.484	0.450	0.955	0.700
OU3MW-02S	OU-3 Community Road	0.343	--	0.504	--	--	--	--	--	--	--	--	0.730	--	--	0.519	0.748	--
OU3MW-02I	OU-3 Community Road	0.180	--	0.219	--	--	--	--	--	--	--	--	0.324	--	--	0.270	0.223	--
OU3MW-03S	OU-3 Community Road	--	--	0.536	0.526	--	0.600	0.605	0.556	0.476	--	--	0.593	--	--	0.537	0.687	--
OU3MW-03I	OU-3 Community Road	0.352	0.426	0.472	0.408	0.491	0.476	--	0.468	0.446	0.447	0.420	0.490	0.515	0.295	0.299	0.370	--
OU3MW-04S	OU-3 Community Road	0.467	--	0.541	--	--	0.475	0.498	0.482	--	--	--	0.913	--	1.050	--	0.548	--
OU3MW-04I	OU-3 Community Road	0.457	--	0.432	--	--	0.593	0.386	0.408	0.510	0.474	--	0.594	--	0.411	--	0.398	--
OU3MW-04D	OU-3 Community Road	0.324	0.308	0.332	0.323	0.379	0.332	0.372	0.377	0.386	0.430	--	0.582	--	0.337	--	0.326	--
OU3MW-04D2	OU-3 Community Road	0.350	0.404	0.354	0.335	0.382	0.324	--	0.328	--	--	--	0.595	--	0.340	--	0.321	--
OU3MW-04D3	OU-3 Community Road	--	--	0.371	--	--	--	--	--	--	--	--	0.586	--	0.363	--	0.388	--
OU3MW-05S	OU-3 Community Road	--	0.387	0.402	0.429	--	0.404	0.448	--	--	--	1.010	--	--	--	0.396	0.329	--
OU3MW-05I	OU-3 Community Road	--	0.450	0.433	0.386	0.250	0.339	0.360	0.372	--	--	0.624	0.505	0.379	0.441	0.387	0.344	--
OU3MW-07S	OU-3 Community Road	--	0.348	0.326	0.298	--	0.310	--	--	0.322	0.317	0.397	0.486	0.330	0.475	0.368	0.390	0.329
OU3MW-07I	OU-3 Community Road	0.365	0.373	0.385	0.377	0.273	0.441	0.464	0.416	0.484	0.464	0.534	0.604	0.420	0.430	0.407	0.440	0.408
OU3MW-07I2	OU-3 Community Road	0.364	0.435	0.427	0.400	0.277	0.445	0.443	0.356	0.366	0.353	0.448	0.573	0.408	0.408	0.421	0.434	0.378
OU3MW-07I3	OU-3 Community Road	0.345	0.402	0.413	--	0.252	0.370	0.361	0.306	0.313	0.304	0.394	0.463	0.378	0.399	0.419	0.397	0.336
OU3MW-07I4	OU-3 Community Road	0.304	--	--	0.336	--	--	--	--	--	--	--	0.379	0.341	--	--	--	0.338
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	0.448	0.467	0.482	0.841	0.374	0.590	0.530	0.492	0.419
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	0.384	0.382	0.390	0.341	0.319	0.332	0.318	0.335	0.360
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	0.350	0.347	0.340	0.284	0.298	0.289	0.249	0.269	0.301
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	0.313	0.272	0.350	0.273	0.387	0.485	0.514	0.555	0.542
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	0.599	0.457	0.601	0.457	0.491	0.403	0.360	0.379	0.397
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	0.355	0.329	0.411	0.327	0.374	0.320	0.331	0.321	0.328
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	34.0	26.0	28.0	13.0	32.0	28.0	27.0	--	3.0	13.0	10.0	10.0	21.0	29.0	30.0	25.0	36.0
MW-34S	OU-3 Community Road	0.0	2.0	0.0	0.0	--	0.6	0.5	1.0	0.0	0.0	0.5	3.0	0.0	1.1	0.0	0.0	2.0
MW-34I	OU-3 Community Road	11.6	36.0	32.0	20.4	27.0	36.0	25.0	42.0	6.0	15.5	25.0	35.0	2.0	15.3	23.0	27.0	31.0
MW-34D	OU-3 Community Road	0.0	0.0	0.0	0.9	0.0	0.4	0.8	0.0	0.4	0.0	11.0	0.0	0.0	1.0	0.0	0.0	3.0
MW-46WR	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	1.0	0.0	1.0	0.0	1.0	0.0	9.0	0.0	2.0
MW-70/70S	OU-3 Community Road	0.0	0.0	1.9	7.0	1.0	0.6	0.3	--	1.6	0.0	1.0	1.0	2.0	1.0	5.0	13.6	0.0
OU3MW-02S	OU-3 Community Road	31.0	--	31.0	--	--	--	--	--	--	--	--	22.0	--	--	14.9	25.0	--

Appendix E - Table E-3

Summary of Groundwater Parameter Data

OU-3 Oxygen Injection System

Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report

Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2013												2014				
		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
OU3MW-02I	OU-3 Community Road	25.0	--	40.0	--	--	--	--	--	--	--	--	17.0	--	--	32.0	17.0	--
OU3MW-03S	OU-3 Community Road	--	--	8.7	0.6	--	--	1.0	0.5	2.4	1.0	--	1.2	--	--	1.4	6.6	--
OU3MW-03I	OU-3 Community Road	3.7	2.0	10.8	8.2	1.0	1.0	--	3.4	13.0	2.8	0.9	0.6	1.1	5.1	1.0	19.3	--
OU3MW-04S	OU-3 Community Road	1.8	--	5.3	--	--	0.4	0.4	4.9	--	--	--	1.4	--	1.1	--	1.4	--
OU3MW-04I	OU-3 Community Road	21.0	--	26.0	--	--	30.3	32.2	26.0	31.0	25.1	--	28.0	--	17.5	--	25.0	--
OU3MW-04D	OU-3 Community Road	1.6	1.0	1.1	2.3	1.0	5.9	17.0	17.9	29.0	38.1	--	6.1	--	0.7	--	0.5	--
OU3MW-04D2	OU-3 Community Road	3.6	1.0	0.3	7.5	1.0	0.5	--	0.5	--	--	--	0.4	--	0.8	--	0.4	--
OU3MW-04D3	OU-3 Community Road	--	--	0.6	--	--	--	--	--	--	--	--	0.3	--	3.7	--	0.3	--
OU3MW-05S	OU-3 Community Road	--	7.0	14.0	2.4	--	0.9	0.9	--	--	--	0.5	--	--	--	4.4	7.6	--
OU3MW-05I	OU-3 Community Road	--	6.0	8.0	4.9	3.3	3.3	5.9	7.1	--	--	21.0	34.1	29.0	23.8	30.0	12.7	--
OU3MW-07S	OU-3 Community Road	22.0	30.0	33.0	23.0	--	36.0	22.0	--	20.0	26.0	31.0	17.0	30.0	14.0	31.0	32.0	26.0
OU3MW-07I	OU-3 Community Road	18.3	35.0	41.0	20.0	30.0	46.0	27.0	42.0	25.0	38.0	46.0	39.0	35.0	42.0	35.0	47.0	26.0
OU3MW-07I2	OU-3 Community Road	40.0	36.0	40.0	25.0	28.0	40.0	17.0	47.0	34.0	45.0	44.0	30.0	27.0	35.0	37.0	43.0	28.0
OU3MW-07I3	OU-3 Community Road	27.0	31.0	33.0	--	27.0	33.0	9.5	17.0	21.0	23.0	30.0	20.0	25.0	12.0	30.0	36.0	25.3
OU3MW-07I4	OU-3 Community Road	0.0	--	--	0.0	--	--	--	--	--	--	--	0.9	0.4	--	--	--	2.1
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	2.0	0.0	0.0	0.0	0.0	3.0	1.0	1.0	0.0
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	4.0	0.0	0.0	0.0	0.8	9.0	12.0	12.0	15.0
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	2.0	0.0	0.0	0.6	12.0	7.0	9.0	22.0	8.0
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	15.0	22.0	22.0	29.0	37.0	30.0	24.0	27.0	22.0
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	2.0	0.0	0.0	0.6	13.0	27.0	30.0	22.0	42.0
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	2.0	0.0	0.0	0.0	4.0	2.0	9.0	12.0	16.0
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	12.3	10.5	11.2	11.3	13.5	16.2	19.9	--	19.7	18.1	17.0	14.5	12.4	9.3	9.8	13.7	13.5
MW-34S	OU-3 Community Road	10.6	8.4	8.7	10.2	--	13.8	19.1	20.7	20.0	19.8	16.1	11.3	9.6	7.6	9.5	11.6	13.2
MW-34I	OU-3 Community Road	14.4	12.1	11.7	12.0	12.0	12.6	16.8	18.0	17.6	18.3	16.5	13.9	12.0	12.9	11.3	12.9	12.1
MW-34D	OU-3 Community Road	14.3	12.6	12.6	13.4	13.6	13.4	16.2	16.6	16.9	17.2	15.4	13.6	13.6	12.3	13.1	13.7	13.4
MW-46WR	OU-3 Community Road	8.2	9.6	8.3	12.7	17.2	19.4	24.6	--	23.4	19.8	16.1	8.9	6.2	7.9	8.3	14.4	17.2
MW-70/70S	OU-3 Community Road	11.0	8.9	8.2	10.1	12.4	15.6	18.6	--	19.1	16.6	15.7	13.2	8.9	7.0	7.3	15.0	13.9
OU3MW-02S	OU-3 Community Road	10.1	--	8.8	--	--	--	--	--	--	--	--	11.2	--	--	9.0	10.3	--
OU3MW-02I	OU-3 Community Road	12.7	--	11.4	--	--	--	--	--	--	--	--	13.5	--	--	9.4	10.0	--
OU3MW-03S	OU-3 Community Road	--	--	8.7	--	--	18.1	20.5	20.3	21.7	--	--	14.1	--	--	6.3	8.4	--
OU3MW-03I	OU-3 Community Road	12.6	11.3	11.7	--	13.6	16.3	--	17.7	18.8	19.7	17.4	15.8	12.4	10.2	9.3	11.5	--
OU3MW-04S	OU-3 Community Road	9.7	--	9.2	--	--	17.0	18.8	21.3	--	--	--	12.1	--	8.0	--	9.6	--
OU3MW-04I	OU-3 Community Road	11.7	--	12.3	--	--	15.4	16.9	18.2	19.6	19.0	--	12.9	--	12.0	--	10.6	--
OU3MW-04D	OU-3 Community Road	12.7	12.6	13.3	13.8	14.3	14.6	16.4	15.8	18.6	16.8	--	13.3	--	12.9	--	12.4	--
OU3MW-04D2	OU-3 Community Road	12.8	13.1	13.5	14.3	15.7	16.2	--	16.7	--	--	--	13.7	--	13.6	--	12.5	--
OU3MW-04D3	OU-3 Community Road	--	--	15.6	--	--	--	--	--	--	--	--	12.7	--	13.3	--	12.9	--
OU3MW-05S	OU-3 Community Road	--	7.6	7.1	13.2	--	15.8	20.9	--	--	--	16.4	--	--	--	5.7	10.4	--
OU3MW-05I	OU-3 Community Road	--	10.5	10.4	15.0	13.9	15.5	21.4	16.9	--	--	15.3	14.3	12.2	6.9	10.5	12.6	--
OU3MW-07S	OU-3 Community Road	--	8.5	8.8	9.2	--	16.0	19.3	--	19.8	17.6	15.1	11.9	9.4	7.5	6.6	11.9	13.4
OU3MW-07I	OU-3 Community Road	9.8	12.3	11.0	10.8	13.0	14.6	18.1	18.0	17.4	16.8	15.5	14.1	12.5	11.3	9.6	12.1	13.0
OU3MW-07I2	OU-3 Community Road	12.2	12.0	11.7	11.6	13.5	14.5	18.0	17.2	17.2	16.1	15.2	14.2	13.0	10.6	9.9	11.9	13.1
OU3MW-07I3	OU-3 Community Road	13.1	11.4	12.0	--	13.9	15.7	19.8	18.0	16.3	16.0	14.9	16.9	12.9	10.1	10.6	13.0	13.2
OU3MW-07I4	OU-3 Community Road	13.3	--	--	11.9	--	--	--	--	--	--	--	14.7	13.3	--	--	--	13.6
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	18.0	17.9	15.5	11.3	11.1	6.0	6.8	12.4	21.1
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	15.7	16.7	15.1	14.5	13.3	9.7	9.5	13.8	14.8
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	14.9	15.8	14.3	13.6	13.4	9.6	10.2	14.3	15.4
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	19.2	19.9	15.9	12.4	11.9	9.0	10.3	13.0	14.6
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	16.7	16.9	15.4	13.2	13.6	11.6	12.5	12.4	13.8
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	16.1	15.9	15.1	14.0	12.6	11.3	12.0	13.4	13.8
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	168	202	220	172	185	159	151	--	58	81	36	13	53	119	211	207	169
MW-34S	OU-3 Community Road	-25	-25	-14	-15	--	-57	-107	-25	-8	-21	-40	150	76	-39	-26	-25	-50
MW-34I	OU-3 Community Road	137	200	187	136	148	143	96	194	107	154	140	177	112	185	197	184	205
MW-34D	OU-3 Community Road	66	54	42	30	25	36	56	82	87	70	13	93	100	17	12	13	15
MW-46WR	OU-3 Community Road	-8	-45	-12	-22	-60	-41	9	--	5	-17	-14	57	27	27	-62	-30	-22
MW-70/70S	OU-3 Community Road	-33	1	-40	-93	-51	-81	-123	--	-15	4	-35	-20	-17	-15	-100	-32	-110
OU3MW-02S	OU-3 Community Road	184	--	151	--	--	--	--	--	--	--	--	151	--	--	195	145	--
OU3MW-02I	OU-3 Community Road	215	--	226	--	--	--	--	--	--	--	--	193	--	--	125	245	--
OU3MW-03S	OU-3 Community Road	--	--	-54	-65	--	-110	-148	-78	-12	--	--	-17	--	--	-24	8	--
OU3MW-03I	OU-3 Community Road	18	-10	19	25	-21	-66	--	-8	79	21	16	-5	-10	95	-89	-12	--
OU3MW-04S	OU-3 Community Road	15	--	-20	--	--	-26	-88	2	--	--	--	-13	--	19	--	-15	--
OU3MW-04I	OU-3 Community Road	130	--	119	--	--	161	143	168	186	216	--	150	--	120	--	196	--
OU3MW-04D	OU-3 Community Road	88	82	137	132	111	158	121	135	217	199	--	168	--	124	--	222	--
OU3MW-04D2	OU-3 Community Road	125	134	61	112	87	121	--	113	--	--	--	144	--	218	--	172	--
OU3MW-04D3	OU-3 Community Road	--	--	188	--	--	--	--	--	--	--	--	143	--	199	--	126	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2013												2014				
		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
OU3MW-05S	OU-3 Community Road	--	129	145	76	--	-29	0	--	--	--	-10	--	--	--	109	143	--
OU3MW-05I	OU-3 Community Road	--	113	85	43	119	22	56	36	--	--	201	183	154	232	199	218	--
OU3MW-07S	OU-3 Community Road	66	82	98	61	--	109	43	--	119	224	178	129	188	57	210	84	63
OU3MW-07I	OU-3 Community Road	136	271	229	187	310	178	178	254	175	229	220	195	241	178	249	252	189
OU3MW-07I2	OU-3 Community Road	255	238	221	193	323	177	145	254	182	236	210	222	263	274	267	245	167
OU3MW-07I3	OU-3 Community Road	237	238	175	--	329	167	154	246	194	217	184	172	262	274	267	208	206
OU3MW-07I4	OU-3 Community Road	191	--	--	221	--	--	--	--	--	--	--	136	129	--	--	--	143
OU3MW-19S	87 Community Road	--	--	--	--	--	--	--	--	-60	-80	-82	-32	22	121	21	77	-92
OU3MW-19I	87 Community Road	--	--	--	--	--	--	--	--	-92	-87	-91	-57	52	23	73	164	178
OU3MW-19I2	87 Community Road	--	--	--	--	--	--	--	--	88	142	130	168	228	140	116	134	154
OU3MW-20S	87 Community Road	--	--	--	--	--	--	--	--	97	103	50	205	191	223	91	113	99
OU3MW-20I	87 Community Road	--	--	--	--	--	--	--	--	-112	-111	-98	-64	72	128	147	226	203
OU3MW-20I2	87 Community Road	--	--	--	--	--	--	--	--	80	131	111	142	125	104	146	146	162

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Summary of Groundwater Parameter Data

OU-3 Oxygen Injection System

Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report

Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2014								2015								
		Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
pH (SU)																		
IO-10	OU-3 Community Road	5.68	6.26	6.28	6.34	6.40	5.81	6.27	--	--	6.34	6.44	6.02	5.98	5.84	6.03	5.36	5.27
MW-34S	OU-3 Community Road	5.51	5.49	5.64	5.10	5.74	6.08	5.72	5.95	5.63	5.72	6.14	5.89	5.77	5.33	5.50	4.75	5.04
MW-34I	OU-3 Community Road	5.67	5.77	6.21	5.31	6.40	6.36	6.11	6.34	6.08	6.12	6.56	6.58	6.43	5.97	6.10	5.14	5.41
MW-34D	OU-3 Community Road	5.36	5.84	5.89	5.60	5.85	5.75	5.55	5.78	5.34	5.47	5.93	5.91	5.83	5.28	5.55	4.86	4.95
MW-46WR	OU-3 Community Road	5.26	5.33	5.37	5.66	5.81	5.27	5.45	--	5.81	5.79	6.02	5.14	5.34	5.11	5.52	5.05	4.94
MW-70/70S	OU-3 Community Road	5.38	5.38	5.82	5.65	5.80	5.20	5.65	--	5.14	5.51	5.74	5.55	5.40	4.90	5.15	4.56	4.84
OU3MW-02S	OU-3 Community Road	--	--	--	5.83	--	5.97	--	--	--	--	5.72	--	5.78	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	5.61	--	5.19	--	--	--	--	5.28	--	5.61	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	5.84	--	--	--	5.52	--	--	--	5.41	--	--	5.83	--	--	--	5.19
OU3MW-03I	OU-3 Community Road	--	5.74	5.82	6.06	5.55	5.35	--	--	--	5.38	--	--	5.87	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	6.05	--	5.82	--	--	--	5.87	--	--	5.62	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	5.86	--	5.80	--	--	--	5.60	--	--	5.93	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	5.92	--	5.83	--	--	--	5.97	--	--	5.46	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	5.82	--	5.58	--	--	--	5.39	--	--	5.36	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	5.69	--	5.94	--	--	--	5.47	--	--	5.50	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	4.76	--	--	--	5.79	--	--	--	6.19	--	--	5.51	--	--	--	5.06
OU3MW-05I	OU-3 Community Road	--	--	4.91	--	--	6.09	--	--	--	5.90	--	--	5.66	--	--	--	--
OU3MW-07S	OU-3 Community Road	5.50	5.39	6.09	5.12	6.09	5.43	5.87	5.72	5.34	5.49	5.98	6.00	5.78	5.36	5.51	5.19	5.29
OU3MW-07I	OU-3 Community Road	5.90	5.65	6.34	5.46	6.40	5.98	6.14	6.04	5.86	5.91	6.37	6.41	6.21	5.85	5.91	5.41	5.59
OU3MW-07I2	OU-3 Community Road	5.77	5.68	6.27	5.44	6.15	5.96	5.81	5.78	5.64	5.98	6.27	6.33	6.12	5.76	5.80	5.23	5.10
OU3MW-07I3	OU-3 Community Road	5.64	5.56	6.05	5.89	5.95	5.41	5.70	5.72	5.47	5.90	6.17	6.27	5.98	5.49	5.52	5.15	4.83
OU3MW-07I4	OU-3 Community Road	--	5.43	--	--	--	5.78	--	--	--	5.33	--	5.92	--	5.26	--	--	4.99
OU3MW-19S	87 Community Road	5.59	5.90	6.05	4.95	5.85	6.06	5.97	5.78	5.95	5.61	5.83	5.84	5.42	5.15	5.55	5.05	4.75
OU3MW-19I	87 Community Road	5.85	6.05	6.23	5.25	5.91	6.05	6.06	5.91	6.16	5.87	6.19	6.30	5.91	5.57	6.03	5.24	5.09
OU3MW-19I2	87 Community Road	5.38	5.77	5.95	5.28	5.84	5.86	5.81	5.71	5.76	5.12	5.99	5.98	5.44	5.26	5.71	5.18	4.93
OU3MW-20S	87 Community Road	5.10	5.05	4.97	4.53	5.20	5.40	5.44	5.40	5.60	5.04	5.44	5.69	5.35	4.77	5.11	4.29	4.55
OU3MW-20I	87 Community Road	5.76	6.10	6.16	5.42	6.25	6.22	6.27	6.19	6.43	5.99	6.24	6.40	6.09	5.68	5.96	4.86	5.48
OU3MW-20I2	87 Community Road	5.28	5.57	5.65	5.17	5.78	5.75	5.76	5.71	6.01	5.63	5.71	5.99	5.68	5.22	5.56	4.69	5.05
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.620	0.358	0.399	0.390	0.386	0.407	0.366	--	--	0.442	0.423	0.779	0.792	0.511	0.442	0.443	0.379
MW-34S	OU-3 Community Road	0.740	1.00	1.42	1.570	1.490	0.894	0.879	1.180	0.874	1.060	1.110	0.940	0.713	1.040	1.090	1.080	0.930
MW-34I	OU-3 Community Road	0.617	0.795	0.409	0.316	0.374	0.345	0.374	0.496	0.473	0.457	0.457	0.409	0.904	0.502	0.416	0.341	0.344
MW-34D	OU-3 Community Road	0.487	0.310	0.347	0.418	0.288	0.277	0.295	0.271	0.361	0.310	0.324	0.342	0.373	0.356	0.329	0.283	0.334
MW-46WR	OU-3 Community Road	1.810	2.38	0.854	1.36	1.31	1.27	1.02	--	2.49	2.700	2.680	1.750	2.190	2.230	1.660	1.070	0.963
MW-70/70S	OU-3 Community Road	1.440	2.20	1.16	0.959	0.656	0.648	0.597	--	0.893	0.658	0.627	0.659	0.833	0.626	0.552	0.528	0.565
OU3MW-02S	OU-3 Community Road	--	--	--	0.391	--	0.411	--	--	--	2.920	--	2.130	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	0.322	--	0.222	--	--	--	0.260	--	0.260	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	0.719	--	--	--	0.54	--	--	--	1.010	--	--	0.873	--	--	--	1.010
OU3MW-03I	OU-3 Community Road	--	0.380	0.364	0.369	0.324	0.362	--	--	--	0.312	--	--	0.283	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	0.693	--	1.020	--	--	--	1.370	--	--	0.557	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	1.10	--	0.42	--	--	--	0.362	--	--	0.864	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	0.407	--	0.380	--	--	--	0.360	--	--	0.344	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	0.364	--	0.384	--	--	--	0.360	--	--	0.321	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	0.349	--	0.340	--	--	--	0.353	--	--	0.401	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	1.07	--	--	--	0.91	--	--	--	0.328	--	--	0.531	--	--	--	0.602
OU3MW-05I	OU-3 Community Road	--	--	0.570	--	--	0.59	--	--	--	0.482	--	--	1.14	--	--	--	--
OU3MW-07S	OU-3 Community Road	0.420	0.337	0.336	0.388	0.370	0.429	0.432	0.428	0.364	0.372	0.427	0.370	0.380	0.314	0.254	0.355	0.339
OU3MW-07I	OU-3 Community Road	0.495	0.375	0.366	0.430	0.347	0.380	0.402	0.441	0.404	0.425	0.428	0.455	0.491	0.423	0.372	0.465	0.435
OU3MW-07I2	OU-3 Community Road	0.477	0.362	0.366	0.407	0.357	0.380	0.382	0.417	0.544	0.419	0.402	0.419	0.460	0.384	0.288	0.356	0.395
OU3MW-07I3	OU-3 Community Road	0.457	0.334	0.327	0.315	0.324	0.372	0.381	0.408	0.531	0.403	0.385	0.398	0.416	0.346	0.266	0.319	0.341
OU3MW-07I4	OU-3 Community Road	--	0.394	--	--	--	0.39	--	--	--	0.535	--	0.407	--	0.398	--	--	0.327
OU3MW-19S	87 Community Road	0.764	0.594	0.285	0.622	0.492	0.325	0.216	0.347	1.370	1.290	0.639	0.513	0.569	0.452	0.432	0.437	0.400
OU3MW-19I	87 Community Road	0.468	0.290	0.319	0.308	0.283	0.259	0.292	0.389	0.359	0.386	0.407	0.401	0.458	0.382	0.362	0.449	0.484
OU3MW-19I2	87 Community Road	0.437	0.330	0.345	0.356	0.312	0.311	0.318	0.324	0.288	0.347	0.350	0.421	0.462	0.390	0.372	0.371	0.539
OU3MW-20S	87 Community Road	0.814	0.719	0.712	0.591	0.496	0.430	0.420	0.484	0.394	0.617	0.644	0.433	0.473	0.389	0.360	0.322	0.314
OU3MW-20I	87 Community Road	0.477	0.350	0.432	0.397	0.382	0.409	0.471	0.471	0.388	0.421	0.442	0.421	0.527	0.460	0.475	0.426	0.454
OU3MW-20I2	87 Community Road	0.403	0.264	0.374	0.418	0.369	0.369	0.394	0.412	0.378	0.442	0.440	0.374	0.428	0.334	0.297	0.292	0.298
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	42.0	25.0	27.0	24.0	24.0	29.0	22.0	--	--	50.0	24.0	26.0	28.0	29.5	32.6	40.8	23.0
MW-34S	OU-3 Community Road	0.0	0.0	0.0	1.0	0.0	0.0	1.0	16.8	0.74	7.6	5.8	0.9	0.6	0.8	0.7	2.3	1.0
MW-34I	OU-3 Community Road	43.0	39.0	21.0	18.0	25.0	31.0	25.0	12.0	50.0	33.4	21.0	28.0	26.0	32.6	23.8	40.6	24.0
MW-34D	OU-3 Community Road	0.0	1.6	17.7	25.0	9.0	8.0	13.0	12.8	17.4	19.2	23.0	24.0	26.0	33.2	18.0	39.6	24.0
MW-46WR	OU-3 Community Road	0.0	0.0	0.8	0.4	1.0	4.6	8.0	--	20.8	8.1	1.0	4.0	3.0	5.9	4.8	3.8	0.2
MW-70/70S	OU-3 Community Road	0.0	0.0	0.0	0.0	0.0	2.1	0.6	--	15.3	21.5	5.0	21.0	7.0	2.4	5.2	3.4	4.0
OU3MW-02S	OU-3 Community Road	--	--	--	18.5	--	15.1	--	--	--	27.37	--	22.67	--	--	--	--	--

Appendix E - Table E-3

Summary of Groundwater Parameter Data

OU-3 Oxygen Injection System

Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report

Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2014								2015								
		Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
OU3MW-02I	OU-3 Community Road	--	--	--	38.1	--	28.6	--	--	--	41.2	--	21.19	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	1.3	--	--	--	0.70	--	--	--	0.59	--	--	0.41	--	--	--	3.25
OU3MW-03I	OU-3 Community Road	--	4.9	17.0	15.1	29.9	28.0	--	--	--	33.4	--	--	47.2	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	6.57	--	2.00	--	--	--	8.50	--	--	0.50	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	27.40	--	18.00	--	--	--	44.00	--	--	19.30	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	31.83	--	25.00	--	--	--	21.23	--	--	27.20	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	6.48	--	8.00	--	--	--	0.66	--	--	0.68	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	0.43	--	1.00	--	--	--	0.62	--	--	0.44	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	8.5	--	--	--	1.80	--	--	10.40	--	--	--	1.10	--	--	--	6.63
OU3MW-05I	OU-3 Community Road	--	--	26.1	--	--	28.60	--	--	10.50	--	--	--	20.30	--	--	--	--
OU3MW-07S	OU-3 Community Road	27.0	28.0	30.0	35.0	30.0	24.0	29.0	13.0	43.0	25.0	25.0	25.0	31.0	32.0	29.4	33.7	28.0
OU3MW-07I	OU-3 Community Road	33.0	36.0	29.0	31.0	28.0	38.0	26.0	12.2	50.0	38.5	28.0	31.0	27.0	29.0	43.8	45.1	41.0
OU3MW-07I2	OU-3 Community Road	48.0	32.0	26.0	23.0	21.0	32.0	18.0	9.5	41.0	39.6	22.0	27.0	29.0	36.0	49.3	50.0	22.0
OU3MW-07I3	OU-3 Community Road	27.0	15.0	24.0	19.0	23.0	25.9	25.0	7.1	26.1	34.2	18.0	25.0	31.0	27.0	19.2	33.2	25.0
OU3MW-07I4	OU-3 Community Road	--	0.39	--	--	--	0.00	--	--	4.41	--	0.60	--	--	0.40	--	--	0.60
OU3MW-19S	87 Community Road	0.0	0.0	3.0	0.2	0.0	0.0	3.0	5.9	6.8	3.0	0.7	0.7	0.7	4.0	0.4	1.0	1.0
OU3MW-19I	87 Community Road	42.0	23.0	22.0	21.0	25.0	26.0	25.0	8.1	8.1	28.3	25.0	26.0	31.0	28.8	28.1	15.0	25.0
OU3MW-19I2	87 Community Road	10.0	3.0	1.4	3.0	0.0	0.0	11.0	6.2	6.2	15.1	21.0	4.0	1.0	0.6	1.4	1.7	2.0
OU3MW-20S	87 Community Road	35.0	28.0	17.0	31.0	25.0	12.0	25.0	7.4	11.1	21.1	28.0	30.0	29.0	18.1	21.0	16.2	21.0
OU3MW-20I	87 Community Road	47.0	28.0	31.0	23.0	23.0	23.0	26.0	10.6	11.5	30.1	24.0	30.0	35.0	42.2	26.2	32.5	34.0
OU3MW-20I2	87 Community Road	7.0	0.0	0.0	2.0	0.0	0.4	0.6	6.5	12.7	17.3	21.0	12.0	0.9	0.5	1.1	11.9	0.4
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	20.5	19.5	21.2	18.9	17.8	16.4	15.3	--	--	6.30	10.00	15.27	13.52	16.40	21.85	19.63	18.11
MW-34S	OU-3 Community Road	19.5	17.8	19.5	18.9	18.8	16.1	10.7	8.6	4.60	7.28	10.60	13.20	14.40	16.20	24.41	20.93	18.66
MW-34I	OU-3 Community Road	18.4	15.3	17.3	15.3	17.0	16.6	14.2	11.5	8.41	10.06	10.80	13.50	14.10	14.50	16.96	18.64	17.61
MW-34D	OU-3 Community Road	16.7	18.3	16.0	16.1	16.0	15.2	14.3	12.6	11.02	11.52	11.20	12.30	14.30	13.80	16.07	18.62	14.51
MW-46WR	OU-3 Community Road	24.1	23.6	25.7	21.3	17.9	17.1	13.0	--	5.70	7.30	11.10	18.35	21.30	22.40	26.57	24.39	17.27
MW-70/70S	OU-3 Community Road	19.8	18.2	25.0	19.7	19.5	15.1	13.2	--	4.51	7.41	5.00	15.40	17.30	17.90	20.86	21.71	17.80
OU3MW-02S	OU-3 Community Road	--	--	--	21.12	--	13.61	--	--	--	5.37	--	13.42	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	16.96	--	13.62	--	--	--	9.21	--	11.53	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	21.5	--	--	--	14.40	--	--	--	6.35	--	--	14.18	--	--	--	16.61
OU3MW-03I	OU-3 Community Road	--	18.7	18.8	18.4	17.4	14.2	--	--	--	8.78	--	--	12.88	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	19.67	--	14.68	--	--	--	5.19	--	--	13.99	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	16.27	--	14.80	--	--	--	7.87	--	--	13.08	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	16.55	--	13.93	--	--	--	9.01	--	--	13.42	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	16.18	--	13.39	--	--	--	10.95	--	--	13.67	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	15.04	--	13.57	--	--	--	10.37	--	--	14.20	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	21.6	--	--	--	15.90	--	--	4.10	--	--	--	14.74	--	--	--	16.94
OU3MW-05I	OU-3 Community Road	--	--	20.6	--	--	15.80	--	--	8.10	--	--	--	13.80	--	--	--	--
OU3MW-07S	OU-3 Community Road	22.4	18.28	23.1	18.3	17.8	14.5	12.9	11.0	5.76	6.54	10.90	13.10	15.90	18.30	20.60	33.72	16.72
OU3MW-07I	OU-3 Community Road	24.1	15.50	23.5	16.0	17.7	14.6	15.2	12.5	9.40	9.6	10.3	12.2	15.2	16.80	18.1	45.1	15.4
OU3MW-07I2	OU-3 Community Road	20.0	14.89	17.9	15.1	16.5	13.8	14.6	14.5	10.05	10.6	11.6	13.0	15.4	16.2	17.9	>50	16.0
OU3MW-07I3	OU-3 Community Road	19.1	16.43	18.0	17.5	16.4	13.3	13.8	12.9	9.60	10.4	11.1	12.5	14.7	18.1	17.9	33.2	15.3
OU3MW-07I4	OU-3 Community Road	--	14.79	--	--	--	13.23	--	--	9.00	--	12.20	--	--	16.60	--	--	15.12
OU3MW-19S	87 Community Road	21.0	19.5	20.6	18.0	17.0	14.3	12.4	10.3	7.50	8.0	9.5	15.1	16.8	19.5	17.7	1.0	15.9
OU3MW-19I	87 Community Road	20.2	18.4	16.9	16.2	16.7	14.8	14.3	12.8	9.20	12.2	11.3	16.6	16.6	19.1	15.7	15.0	13.9
OU3MW-19I2	87 Community Road	20.2	18.5	19.5	15.3	16.6	13.7	13.3	12.9	9.80	11.4	10.8	13.8	16.4	19.7	21.0	1.7	13.0
OU3MW-20S	87 Community Road	18.7	19.9	19.6	18.1	19.0	16.3	15.4	11.8	8.90	6.6	8.4	11.6	15.1	17.5	19.2	16.2	16.5
OU3MW-20I	87 Community Road	18.7	17.3	17.2	16.0	17.0	16.3	15.2	12.7	10.00	9.8	10.5	12.4	14.0	16.4	15.4	32.5	14.6
OU3MW-20I2	87 Community Road	17.4	18.0	16.9	15.5	15.8	15.1	13.9	12.5	11.20	10.8	11.2	12.9	14.4	17.1	15.8	11.9	14.1
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	215	99	161	178	190	88	150	--	--	240	196	207	247	154	165	209	75
MW-34S	OU-3 Community Road	-66	-51	-32	-68	-36	24	118	24	54	61	63	-49	-62	-38	1	14	6
MW-34I	OU-3 Community Road	205	171	190	115	173	193	208	256	210	238	257	224	178	176	257	102	61
MW-34D	OU-3 Community Road	33	16	188	150	182	195	192	287	252	221	299	239	187	184	283	172	189
MW-46WR	OU-3 Community Road	-16	-31	55	9	-16	2	54	--	-13	66	-14	127	-9	-5	30	39	0
MW-70/70S	OU-3 Community Road	-57	-61	-75	-19	-35	10	0	--	204	131	89	50	115	51	73	94	95
OU3MW-02S	OU-3 Community Road	--	--	--	201	--	251	--	--	--	253	--	206	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	247	--	270	--	--	--	267	--	240	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	-72	--	--	--	20	--	--	--	87	--	--	-5	--	--	--	-34
OU3MW-03I	OU-3 Community Road	--	6	29	15	89	172	--	--	--	260	--	--	176	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	-66	--	59	--	--	--	159	--	--	48	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	215	--	85	--	--	--	306	--	--	252	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	207	--	156	--	--	--	262	--	--	273	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	175	--	203	--	--	--	248	--	--	83	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	169	--	95	--	--	--	164	--	--	192	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2014								2015								
		Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
OU3MW-05S	OU-3 Community Road	--	90	--	--	--	61	--	--	128	--	--	--	180	--	--	--	-34
OU3MW-05I	OU-3 Community Road	--	--	249	--	--	187	--	--	191	--	--	--	246	--	--	--	--
OU3MW-07S	OU-3 Community Road	136	180	69	35	125	204	114	133	290	212	168	180	202	165	211	208	78
OU3MW-07I	OU-3 Community Road	150	235	208	144	207	165	225	162	307	200	250	247	191	155	229	209	136
OU3MW-07I2	OU-3 Community Road	188	260	223	167	217	170	235	189	268	257	252	248	182	185	226	222	271
OU3MW-07I3	OU-3 Community Road	150	258	202	119	208	282	221	191	255	247	253	228	157	165	218	234	268
OU3MW-07I4	OU-3 Community Road	--	127	--	--	--	135	--	--	228	--	172	--	--	124	--	--	262
OU3MW-19S	87 Community Road	-115	-126	-20	-104	-41	-15	16	-31	39	118	-27	-82	-66	-106	-160	-5	54
OU3MW-19I	87 Community Road	277	178	179	115	164	190	215	188	147	285	186	226	156	210	129	72	180
OU3MW-19I2	87 Community Road	219	135	125	70	73	107	164	146	183	302	280	168	124	185	176	100	158
OU3MW-20S	87 Community Road	92	116	223	176	173	93	153	158	200	279	210	176	145	125	135	139	177
OU3MW-20I	87 Community Road	276	157	172	151	170	183	151	189	265	279	239	225	148	157	248	150	146
OU3MW-20I2	87 Community Road	202	135	151	125	119	117	102	163	184	275	234	224	130	114	185	157	142

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Summary of Groundwater Parameter Data

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Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2015				2016								2017				
		Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
pH (SU)																		
IO-10	OU-3 Community Road	5.09	5.72	--	5.91	5.77	5.53	5.74	6.30	5.76	6.24	--	--	6.27	--	--	6.53	--
MW-34S	OU-3 Community Road	5.04	4.77	5.83	5.88	5.46	5.29	5.35	6.83	5.36	5.82	--	--	5.82	--	--	6.36	--
MW-34I	OU-3 Community Road	5.47	5.10	5.88	5.88	5.84	5.58	5.84	6.18	5.72	6.02	--	--	6.46	--	--	6.82	--
MW-34D	OU-3 Community Road	4.97	4.89	5.62	5.52	5.50	5.17	5.33	5.96	5.44	5.91	--	--	5.88	--	--	6.19	--
MW-46WR	OU-3 Community Road	4.82	4.89	4.31	5.35	5.25	5.23	5.51	5.32	4.82	5.43	--	--	5.56	--	--	5.96	--
MW-70/70S	OU-3 Community Road	4.63	5.22	5.17	5.00	5.38	4.62	4.85	5.31	4.90	5.09	--	--	5.63	--	--	5.78	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	6.01	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	5.86	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	5.69	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	6.37	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	6.13	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	6.59	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	6.18	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	6.10	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	6.19	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	6.15	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	6.37	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	5.50	5.54	5.67	5.55	5.13	5.15	5.59	5.80	5.51	5.96	--	--	5.95	--	--	6.11	--
OU3MW-07I	OU-3 Community Road	5.90	6.06	6.13	6.10	5.72	5.67	6.14	6.20	5.91	6.36	--	--	6.31	--	--	6.55	--
OU3MW-07I2	OU-3 Community Road	5.70	5.78	5.47	5.81	5.43	5.49	4.81	5.92	6.11	6.05	--	--	6.15	--	--	6.37	--
OU3MW-07I3	OU-3 Community Road	4.68	5.61	5.38	5.67	5.40	5.33	4.82	5.88	5.98	5.99	--	--	5.86	--	--	6.18	--
OU3MW-07I4	OU-3 Community Road	4.87	--	5.21	--	--	--	4.60	--	5.80	--	--	--	--	5.75	--	6.12	--
OU3MW-19S	87 Community Road	5.02	5.43	5.48	5.61	4.97	5.10	5.62	5.47	4.98	5.51	--	--	6.10	--	--	6.22	--
OU3MW-19I	87 Community Road	5.27	5.70	5.76	5.89	5.39	5.63	6.12	6.32	5.85	6.07	--	--	6.19	--	--	6.35	--
OU3MW-19I2	87 Community Road	5.08	5.52	5.65	5.58	4.90	5.09	5.58	5.92	5.47	5.84	--	--	6.03	--	--	6.28	--
OU3MW-20S	87 Community Road	4.86	5.08	4.81	4.71	4.75	4.78	4.25	5.25	4.86	4.94	--	--	5.26	--	--	5.66	--
OU3MW-20I	87 Community Road	5.45	6.02	5.62	5.59	5.63	5.71	5.45	6.21	5.92	6.12	--	--	6.17	--	--	6.53	--
OU3MW-20I2	87 Community Road	5.31	5.55	5.12	5.01	5.00	4.88	4.25	5.66	5.32	5.71	--	--	5.73	--	--	6.03	--
Conductivity (mS/cm)																		
IO-10	OU-3 Community Road	0.357	0.416	--	0.402	0.535	0.826	0.955	0.625	0.425	0.486	--	--	0.459	--	--	0.600	--
MW-34S	OU-3 Community Road	0.956	0.701	1.210	0.508	0.724	0.726	0.775	0.723	0.896	1.17	--	--	0.845	--	--	1.440	--
MW-34I	OU-3 Community Road	0.416	0.360	0.393	0.395	0.443	0.525	0.575	0.953	1.04	0.532	--	--	0.413	--	--	0.406	--
MW-34D	OU-3 Community Road	0.428	0.354	0.360	0.341	0.343	0.335	0.354	0.370	0.296	0.410	--	--	0.365	--	--	0.362	--
MW-46WR	OU-3 Community Road	0.995	1.050	0.619	0.907	0.954	1.530	0.762	0.685	0.551	0.981	--	--	0.776	--	--	0.856	--
MW-70/70S	OU-3 Community Road	0.480	5.280	0.397	0.486	0.390	0.483	0.577	1.540	0.610	1.10	--	--	1.000	--	--	0.558	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	9.05	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	1.16	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	0.556	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	0.879	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	0.680	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	0.356	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	0.35	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	0.37	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	0.43	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	0.405	0.422	0.413	0.343	0.366	0.351	0.304	0.437	0.280	0.450	--	--	0.691	--	--	0.658	--
OU3MW-07I	OU-3 Community Road	0.513	0.494	0.506	0.505	0.551	0.492	0.452	0.529	0.736	1.74	--	--	0.782	--	--	1.340	--
OU3MW-07I2	OU-3 Community Road	0.436	0.402	0.436	0.444	0.493	0.448	0.360	1.560	2.260	1.55	--	--	0.666	--	--	0.825	--
OU3MW-07I3	OU-3 Community Road	0.353	0.367	0.345	0.394	0.450	0.360	0.288	0.451	0.374	0.511	--	--	0.369	--	--	0.485	--
OU3MW-07I4	OU-3 Community Road	0.327	--	0.339	--	--	--	0.25	--	0.34	--	--	--	--	--	0.456	--	0.407
OU3MW-19S	87 Community Road	0.663	0.550	0.384	0.897	1.620	0.718	0.752	0.369	0.302	0.453	--	--	0.445	--	--	0.533	--
OU3MW-19I	87 Community Road	0.591	0.483	0.409	0.470	0.525	0.448	0.398	0.359	0.295	0.382	--	--	0.325	--	--	0.270	--
OU3MW-19I2	87 Community Road	0.690	0.498	0.375	0.364	0.408	0.363	0.335	0.386	0.317	0.447	--	--	0.398	--	--	0.378	--
OU3MW-20S	87 Community Road	0.324	0.317	0.450	0.941	0.828	0.576	0.445	0.370	0.335	0.474	--	--	0.442	--	--	0.813	--
OU3MW-20I	87 Community Road	0.492	0.467	0.497	0.465	0.503	2.210	2.910	1.910	0.731	0.595	--	--	0.629	--	--	0.827	--
OU3MW-20I2	87 Community Road	0.317	0.322	0.341	0.377	0.427	0.362	0.293	0.357	0.298	0.390	--	--	0.340	--	--	0.66	--
Dissolved Oxygen (mg/L)																		
IO-10	OU-3 Community Road	21.0	47.2	--	19.0	24.0	17.4	22.0	27.0	30.0	23.0	--	--	24.0	--	--	16.0	--
MW-34S	OU-3 Community Road	0.0	1.6	4.0	5.0	0.0	0.0	1.0	3.0	1.0	0.2	--	--	1.5	--	--	4.0	--
MW-34I	OU-3 Community Road	23.0	33.4	19.0	19.0	27.0	28.0	28.0	26.0	5.0	23.0	--	--	37.0	--	--	23.0	--
MW-34D	OU-3 Community Road	19.0	18.7	11.0	11.0	11.0	23.0	25.0	27.0	23.0	21.0	--	--	6.0	--	--	6.0	--
MW-46WR	OU-3 Community Road	0.2	7.3	2.0	0.0	6.0	4.0	8.0	6.0	3.0	0.2	--	--	4.0	--	--	3.0	--
MW-70/70S	OU-3 Community Road	0.2	1.1	3.0	0.0	5.0	0.8	1.0	2.0	2.0	0.4	--	--	1.0	--	--	4.0	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	19.63	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
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 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2015				2016								2017				
		Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	16.14	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	1.01	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	21.34	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	6.81	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	19.35	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	5.70	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	3.68	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	4.70	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	5.60	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	12.62	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	24.0	31.0	22.0	21.0	23.0	24.0	25.0	33.0	31.0	32.0	--	--	22.0	--	--	19.0	--
OU3MW-07I	OU-3 Community Road	24.0	46.7	21.0	22.0	27.0	27.0	22.0	23.0	41.0	32.0	--	--	21.0	--	--	21.0	--
OU3MW-07I2	OU-3 Community Road	32.0	50.0	20.0	18.0	23.0	36.7	25.0	21.0	30.0	40.0	--	--	22.0	--	--	16.0	--
OU3MW-07I3	OU-3 Community Road	19.0	39.6	14.0	20.0	23.0	26.0	33.0	23.0	32.0	26.0	--	--	23.0	--	--	15.0	--
OU3MW-07I4	OU-3 Community Road	0.33	--	0.70	--	--	--	0.00	--	4.57	--	--	--	--	3.9	--	2.0	--
OU3MW-19S	87 Community Road	0.2	0.6	2.0	2.4	0.4	0.0	1.0	8.0	9.0	5.0	--	--	2.7	--	--	5.0	--
OU3MW-19I	87 Community Road	25.0	37.8	13.0	21.0	24.0	22.0	15.0	36.0	31.0	28.0	--	--	26.0	--	--	21.0	--
OU3MW-19I2	87 Community Road	0.4	0.7	2.4	15.0	15.0	7.0	2.0	4.0	1.0	2.0	--	--	2.0	--	--	0.6	--
OU3MW-20S	87 Community Road	23.0	34.5	21.0	25.0	26.0	27.0	23.0	19.0	26.0	27.0	--	--	21.0	--	--	28.0	--
OU3MW-20I	87 Community Road	21.0	>50	19.0	22.0	23.0	30.0	42.0	32.0	39.0	39.0	--	--	28.0	--	--	33.0	--
OU3MW-20I2	87 Community Road	0.2	0.8	0.0	7.0	10.0	10.0	3.9	3.2	1.0	1.0	--	--	2.0	--	--	2.0	--
Temperature (degrees Celcius)																		
IO-10	OU-3 Community Road	16.58	15.62	--	10.50	10.80	12.20	13.06	17.81	20.37	17.35	--	--	15.50	--	--	8.89	--
MW-34S	OU-3 Community Road	15.40	15.61	7.80	8.20	10.20	11.20	11.90	16.00	20.84	19.33	--	--	17.30	--	--	8.38	--
MW-34I	OU-3 Community Road	15.80	17.79	11.60	12.10	12.20	12.60	12.98	14.26	19.67	16.45	--	--	16.64	--	--	13.38	--
MW-34D	OU-3 Community Road	14.60	17.62	11.20	11.90	12.60	12.90	13.20	14.28	20.18	15.72	--	--	15.75	--	--	12.01	--
MW-46WR	OU-3 Community Road	14.47	13.05	10.85	6.90	11.10	15.80	15.81	20.52	23.61	23.97	--	--	14.89	--	--	8.06	--
MW-70/70S	OU-3 Community Road	15.04	14.26	10.40	6.50	10.00	11.60	11.89	18.06	20.60	19.06	--	--	16.68	--	--	8.56	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	16.65	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	14.85	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	16.76	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	15.24	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	14.23	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	14.55	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	15.25	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	14.48	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	14.40	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	13.54	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	14.22	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	14.96	12.60	10.20	8.10	9.70	10.90	12.21	17.48	19.17	20.38	--	--	15.75	--	--	8.78	--
OU3MW-07I	OU-3 Community Road	14.5	13.8	11.4	10.9	11.0	11.8	12.0	15.4	16.1	19.5	--	--	15.36	--	--	11.28	--
OU3MW-07I2	OU-3 Community Road	14.1	13.7	12.2	11.4	11.2	11.9	15.4	14.7	16.1	20.6	--	--	14.71	--	--	12.55	--
OU3MW-07I3	OU-3 Community Road	14.6	13.5	12.1	11.4	11.2	12.4	15.8	13.9	16.4	18.9	--	--	18.40	--	--	12.76	--
OU3MW-07I4	OU-3 Community Road	14.33	--	11.30	--	--	--	15.31	--	15.71	--	--	--	--	12.21	--	12.58	--
OU3MW-19S	87 Community Road	13.30	12.4	6.2	8.1	9.4	10.1	12.6	17.1	22.3	21.1	--	--	14.30	--	--	9.65	--
OU3MW-19I	87 Community Road	13.7	13.6	9.3	10.9	11.3	11.2	12.4	16.8	19.6	19.1	--	--	14.83	--	--	12.11	--
OU3MW-19I2	87 Community Road	12.9	13.0	8.1	10.6	12.0	12.0	10.8	17.1	20.4	19.2	--	--	14.14	--	--	12.55	--
OU3MW-20S	87 Community Road	17.0	14.1	11.3	9.0	9.8	12.3	14.9	15.7	18.9	20.7	--	--	18.05	--	--	10.62	--
OU3MW-20I	87 Community Road	15.9	14.1	12.0	11.7	11.1	12.3	16.1	15.4	17.0	19.8	--	--	14.70	--	--	13.02	--
OU3MW-20I2	87 Community Road	14.6	13.5	11.6	11.0	11.1	11.9	15.6	15.5	17.8	18.9	--	--	14.84	--	--	12.93	--
Oxidation Reduction Potential (mV)																		
IO-10	OU-3 Community Road	155	168	--	158	164	187	121	160	164	193	--	--	183	--	--	241	--
MW-34S	OU-3 Community Road	-27	46	123	170	23	13	-4	-46	-65	-57	--	--	-25	--	--	162	--
MW-34I	OU-3 Community Road	184	114	181	198	166	196	153	222	150	194	--	--	231	--	--	216	--
MW-34D	OU-3 Community Road	209	139	181	182	135	209	159	170	203	207	--	--	205	--	--	224	--
MW-46WR	OU-3 Community Road	72	82	85	53	69	38	68	25	26	16	--	--	6	--	--	-18	--
MW-70/70S	OU-3 Community Road	86	119	51	50	59	101	62	3	-4	25	--	--	-46	--	--	-70	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	90	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	190	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	31	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	134	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	147	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	154	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	124	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	124	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2015		2016												2017		
		Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	-21	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	235	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	99	121	184	79	176	217	138	204	205	241	--	--	102	--	--	170	--
OU3MW-07I	OU-3 Community Road	182	210	182	196	230	204	178	200	208	303	--	--	167	--	--	242	--
OU3MW-07I2	OU-3 Community Road	205	216	228	200	242	205	275	279	308	301	--	--	193	--	--	268	--
OU3MW-07I3	OU-3 Community Road	284	208	206	188	250	194	281	267	354	297	--	--	207	--	--	295	--
OU3MW-07I4	OU-3 Community Road	269	--	163	--	--	--	239	--	127	--	--	--	--	167	--	188	--
OU3MW-19S	87 Community Road	-10	-42	-18	-24	28	16	15	26	39	20	--	--	-43	--	--	-135	--
OU3MW-19I	87 Community Road	193	200	182	200	239	205	135	165	178	311	--	--	158	--	--	219	--
OU3MW-19I2	87 Community Road	188	163	123	175	253	208	160	180	189	194	--	--	131	--	--	114	--
OU3MW-20S	87 Community Road	312	242	213	241	242	224	271	180	204	204	--	--	170	--	--	149	--
OU3MW-20I	87 Community Road	289	199	186	204	205	190	310	196	194	252	--	--	155	--	--	208	--
OU3MW-20I2	87 Community Road	247	161	117	243	189	212	318	239	236	207	--	--	150	--	--	162	--

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 OU-3 Oxygen Injection System
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Well ID	Oxygen Injection System	2017										2018	
		Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	
pH (SU)													
IO-10	OU-3 Community Road	--	6.59	--	--	6.02	--	--	6.48	--	--	6.89	
MW-34S	OU-3 Community Road	--	6.34	--	--	5.79	--	--	4.97	--	--	6.43	
MW-34I	OU-3 Community Road	--	6.74	--	--	6.18	--	--	6.58	--	--	6.47	
MW-34D	OU-3 Community Road	--	6.14	--	--	5.84	--	--	5.36	--	--	6.41	
MW-46WR	OU-3 Community Road	--	6.01	--	--	5.14	6.14	--	5.89	--	--	5.65	
MW-70/70S	OU-3 Community Road	--	5.76	--	--	5.27	--	--	5.88	--	--	5.37	
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07S	OU-3 Community Road	--	5.86	--	--	5.22	--	--	5.76	--	--	--	
OU3MW-07I	OU-3 Community Road	--	6.56	--	--	6.02	--	--	6.09	--	--	--	
OU3MW-07I2	OU-3 Community Road	--	6.43	--	--	5.75	--	--	5.83	--	--	--	
OU3MW-07I3	OU-3 Community Road	--	6.02	--	--	5.44	--	--	5.63	--	--	--	
OU3MW-07I4	OU-3 Community Road	--	6.13	--	--	5.64	--	--	--	--	--	--	
OU3MW-19S	87 Community Road	--	6.01	--	--	5.42	--	5.79	--	--	--	6.46	
OU3MW-19I	87 Community Road	--	6.00	--	--	5.98	--	6.11	--	--	--	6.61	
OU3MW-19I2	87 Community Road	--	6.15	--	--	5.73	--	5.93	--	--	--	6.65	
OU3MW-20S	87 Community Road	5.10	--	--	--	4.90	--	5.40	--	--	--	6.00	
OU3MW-20I	87 Community Road	6.04	--	--	--	5.80	--	6.31	--	--	--	6.85	
OU3MW-20I2	87 Community Road	5.58	--	--	--	5.57	--	5.76	--	--	--	6.43	
Conductivity (mS/cm)													
IO-10	OU-3 Community Road	--	0.405	--	--	0.743	--	--	0.378	--	--	0.554	
MW-34S	OU-3 Community Road	--	0.545	--	--	0.954	--	--	0.724	--	--	0.681	
MW-34I	OU-3 Community Road	--	0.394	--	--	0.614	--	--	0.378	--	--	0.356	
MW-34D	OU-3 Community Road	--	0.279	--	--	0.427	--	--	0.403	--	--	0.368	
MW-46WR	OU-3 Community Road	--	0.550	--	--	0.872	1.120	--	0.864	--	--	1.79	
MW-70/70S	OU-3 Community Road	--	0.431	--	--	0.961	--	--	1.01	--	--	0.760	
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	
OU3MW-07S	OU-3 Community Road	--	0.727	--	--	6.900	--	--	1.25	--	--	--	
OU3MW-07I	OU-3 Community Road	--	0.567	--	--	1.910	--	--	1.43	--	--	--	
OU3MW-07I2	OU-3 Community Road	--	0.679	--	--	1.020	--	--	0.865	--	--	--	
OU3MW-07I3	OU-3 Community Road	--	0.365	--	--	0.647	--	--	0.872	--	--	--	
OU3MW-07I4	OU-3 Community Road	--	0.299	--	--	0.835	--	--	--	--	--	--	
OU3MW-19S	87 Community Road	--	0.608	--	--	1.020	--	0.471	--	--	--	0.880	
OU3MW-19I	87 Community Road	--	0.400	--	--	0.693	--	0.259	--	--	--	0.456	
OU3MW-19I2	87 Community Road	--	0.254	--	--	0.935	--	0.364	--	--	--	0.260	
OU3MW-20S	87 Community Road	1.970	--	--	--	1.170	--	0.630	--	--	--	2.32	
OU3MW-20I	87 Community Road	1.110	--	--	--	1.750	--	0.751	--	--	--	1.01	
OU3MW-20I2	87 Community Road	0.88	--	--	--	1.020	--	0.478	--	--	--	0.758	
Dissolved Oxygen (mg/L)													
IO-10	OU-3 Community Road	--	30.0	--	--	31.03	--	--	24	--	--	26	
MW-34S	OU-3 Community Road	--	0.0	--	--	0.00	--	--	1	--	--	2	
MW-34I	OU-3 Community Road	--	29.0	--	--	31.00	--	--	26	--	--	30	
MW-34D	OU-3 Community Road	--	6.0	--	--	23.00	--	--	20	--	--	4	
MW-46WR	OU-3 Community Road	--	7.0	--	--	9.00	4.37	--	4	--	--	5	
MW-70/70S	OU-3 Community Road	--	4.0	--	--	3.00	--	--	3	--	--	6	
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2017										2018	
		Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	28.0	--	--	50.00	--	--	25	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	31.0	--	--	50.00	--	--	24	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	36.0	--	--	50.00	--	--	23	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	14.0	--	--	50.00	--	--	21	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	0.0	--	--	0.84	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	10.0	--	--	7.00	--	1	--	--	--	--	7
OU3MW-19I	87 Community Road	--	31.0	--	--	28.00	--	25	--	--	--	--	25
OU3MW-19I2	87 Community Road	--	11.0	--	--	1.00	--	1	--	--	--	--	3
OU3MW-20S	87 Community Road	19.0	--	--	--	17.00	--	20	--	--	--	--	23
OU3MW-20I	87 Community Road	19.0	--	--	--	30.00	--	22	--	--	--	--	30
OU3MW-20I2	87 Community Road	6.0	--	--	--	2.00	--	1	--	--	--	--	8
Temperature (degrees Celcius)													
IO-10	OU-3 Community Road	--	12.08	--	--	19.55	--	--	15.50	--	--	--	10.65
MW-34S	OU-3 Community Road	--	11.42	--	--	19.49	--	--	18.64	--	--	--	7.39
MW-34I	OU-3 Community Road	--	10.92	--	--	17.34	--	--	16.11	--	--	--	12.22
MW-34D	OU-3 Community Road	--	12.02	--	--	16.52	--	--	16.47	--	--	--	12.31
MW-46WR	OU-3 Community Road	--	14.37	--	--	27.00	25.74	--	16.36	--	--	--	8.38
MW-70/70S	OU-3 Community Road	--	11.40	--	--	21.48	--	--	16.63	--	--	--	7.90
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	12.99	--	--	20.81	--	--	16.63	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	13.80	--	--	17.31	--	--	15.54	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	13.75	--	--	16.70	--	--	15.05	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	12.85	--	--	16.44	--	--	14.52	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	14.21	--	--	16.12	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	12.94	--	--	19.01	--	15.78	--	--	--	--	10.54
OU3MW-19I	87 Community Road	--	13.32	--	--	16.30	--	15.06	--	--	--	--	8.88
OU3MW-19I2	87 Community Road	--	14.18	--	--	16.12	--	14.69	--	--	--	--	10.96
OU3MW-20S	87 Community Road	11.63	--	--	--	19.17	--	17.60	--	--	--	--	9.62
OU3MW-20I	87 Community Road	13.00	--	--	--	16.66	--	16.05	--	--	--	--	11.83
OU3MW-20I2	87 Community Road	13.97	--	--	--	16.34	--	16.21	--	--	--	--	12.56
Oxidation Reduction Potential (mV)													
IO-10	OU-3 Community Road	--	198	--	--	158	--	--	140	--	--	--	108
MW-34S	OU-3 Community Road	--	0	--	--	-59	--	--	66	--	--	--	60
MW-34I	OU-3 Community Road	--	242	--	--	168	--	--	129	--	--	--	90
MW-34D	OU-3 Community Road	--	263	--	--	152	--	--	203	--	--	--	89
MW-46WR	OU-3 Community Road	--	64	--	--	59	47	--	22	--	--	--	15
MW-70/70S	OU-3 Community Road	--	44	--	--	17	--	--	-8	--	--	--	-17
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2017										2018	
		Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	--	180	--	--	144	--	--	118	--	--	--	--
OU3MW-07I	OU-3 Community Road	--	287	--	--	222	--	--	197	--	--	--	--
OU3MW-07I2	OU-3 Community Road	--	285	--	--	251	--	--	230	--	--	--	--
OU3MW-07I3	OU-3 Community Road	--	271	--	--	241	--	--	249	--	--	--	--
OU3MW-07I4	OU-3 Community Road	--	184	--	--	176	--	--	--	--	--	--	--
OU3MW-19S	87 Community Road	--	51	--	--	27	--	136	--	--	--	--	103
OU3MW-19I	87 Community Road	--	270	--	--	178	--	216	--	--	--	--	182
OU3MW-19I2	87 Community Road	--	291	--	--	197	--	195	--	--	--	--	171
OU3MW-20S	87 Community Road	178	--	--	--	189	--	203	--	--	--	--	150
OU3MW-20I	87 Community Road	210	--	--	--	209	--	212	--	--	--	--	159
OU3MW-20I2	87 Community Road	193	--	--	--	183	--	137	--	--	--	--	152

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 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
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Well ID	Oxygen Injection System	2018									
		Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
pH (SU)											
IO-10	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
MW-34S	OU-3 Community Road	--	--	6.28	--	--	--	--	--	--	--
MW-34I	OU-3 Community Road	--	--	6.20	--	--	--	--	--	--	--
MW-34D	OU-3 Community Road	--	--	5.90	--	--	--	--	--	--	--
MW-46WR	OU-3 Community Road	--	--	5.90	--	--	--	--	--	--	--
MW-70/70S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	5.67	--	6.00	--	6.20	--	--	--	6.35	--
OU3MW-07I	OU-3 Community Road	6.17	--	6.56	--	6.56	--	--	--	6.13	--
OU3MW-07I2	OU-3 Community Road	6.01	--	6.20	--	6.28	--	--	--	6.64	--
OU3MW-07I3	OU-3 Community Road	5.79	--	5.78	--	5.93	--	--	--	5.96	--
OU3MW-07I4	OU-3 Community Road	--	--	5.98	--	6.14	--	--	--	6.84	--
OU3MW-19S	87 Community Road	--	--	5.94	--	5.77	--	--	--	5.91	--
OU3MW-19I	87 Community Road	--	--	6.43	--	6.46	--	--	--	6.31	--
OU3MW-19I2	87 Community Road	--	--	6.21	--	6.16	--	--	--	6.64	--
OU3MW-20S	87 Community Road	--	--	5.70	--	--	5.53	--	--	5.57	--
OU3MW-20I	87 Community Road	--	--	6.33	--	--	6.10	--	--	6.11	--
OU3MW-20I2	87 Community Road	--	--	5.58	--	--	5.52	--	--	5.77	--
Conductivity (mS/cm)											
IO-10	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
MW-34S	OU-3 Community Road	--	--	0.494	--	--	--	--	--	--	--
MW-34I	OU-3 Community Road	--	--	0.449	--	--	--	--	--	--	--
MW-34D	OU-3 Community Road	--	--	0.233	--	--	--	--	--	--	--
MW-46WR	OU-3 Community Road	--	--	1.320	--	--	--	--	--	--	--
MW-70/70S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	1.66	--	0.605	--	0.475	--	--	--	1.670	--
OU3MW-07I	OU-3 Community Road	1.44	--	0.599	--	0.578	--	--	--	0.893	--
OU3MW-07I2	OU-3 Community Road	0.851	--	0.541	--	0.411	--	--	--	0.482	--
OU3MW-07I3	OU-3 Community Road	0.590	--	0.476	--	0.271	--	--	--	0.201	--
OU3MW-07I4	OU-3 Community Road	--	--	0.446	--	0.158	--	--	--	0.235	--
OU3MW-19S	87 Community Road	--	--	0.264	--	0.259	--	--	--	0.267	--
OU3MW-19I	87 Community Road	--	--	0.262	--	0.195	--	--	--	0.529	--
OU3MW-19I2	87 Community Road	--	--	0.132	--	0.156	--	--	--	0.751	--
OU3MW-20S	87 Community Road	--	--	0.467	--	--	0.979	--	--	3.150	--
OU3MW-20I	87 Community Road	--	--	0.581	--	--	0.422	--	--	1.080	--
OU3MW-20I2	87 Community Road	--	--	0.364	--	--	0.516	--	--	0.234	--
Dissolved Oxygen (mg/L)											
IO-10	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
MW-34S	OU-3 Community Road	--	--	4.0	--	--	--	--	--	--	--
MW-34I	OU-3 Community Road	--	--	25.0	--	--	--	--	--	--	--
MW-34D	OU-3 Community Road	--	--	17.0	--	--	--	--	--	--	--
MW-46WR	OU-3 Community Road	--	--	12.0	--	--	--	--	--	--	--
MW-70/70S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2018									
		Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	17	--	18.0	--	20.0	--	--	--	20.0	--
OU3MW-07I	OU-3 Community Road	18	--	5.0	--	16.0	--	--	--	24.0	--
OU3MW-07I2	OU-3 Community Road	17	--	18.0	--	31.0	--	--	--	35.0	--
OU3MW-07I3	OU-3 Community Road	20	--	12.0	--	24.0	--	--	--	7.0	--
OU3MW-07I4	OU-3 Community Road	--	--	2.0	--	4.0	--	--	--	0.0	--
OU3MW-19S	87 Community Road	--	--	8.0	--	29.0	--	--	--	3.0	--
OU3MW-19I	87 Community Road	--	--	16.0	--	24.0	--	--	--	16.0	--
OU3MW-19I2	87 Community Road	--	--	22.0	--	4.0	24.0	--	--	2.0	--
OU3MW-20S	87 Community Road	--	--	40.0	--	--	24.0	--	--	15.0	--
OU3MW-20I	87 Community Road	--	--	4.0	--	--	25.0	--	--	38.0	--
OU3MW-20I2	87 Community Road	--	--	--	--	--	1.0	--	--	2.0	--
Temperature (degrees Celcius)											
IO-10	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
MW-34S	OU-3 Community Road	--	--	17.06	--	--	--	--	--	--	--
MW-34I	OU-3 Community Road	--	--	14.99	--	--	--	--	--	--	--
MW-34D	OU-3 Community Road	--	--	16.15	--	--	--	--	--	--	--
MW-46WR	OU-3 Community Road	--	--	20.49	--	--	--	--	--	--	--
MW-70/70S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	7.27	--	16.06	--	23.89	--	--	--	15.36	--
OU3MW-07I	OU-3 Community Road	8.89	--	15.65	--	21.18	--	--	--	17.27	--
OU3MW-07I2	OU-3 Community Road	9.30	--	16.27	--	21.60	--	--	--	14.50	--
OU3MW-07I3	OU-3 Community Road	10.62	--	16.39	--	25.42	--	--	--	14.65	--
OU3MW-07I4	OU-3 Community Road	--	--	16.76	--	27.58	--	--	--	13.70	--
OU3MW-19S	87 Community Road	--	--	21.50	--	23.42	--	--	--	14.72	--
OU3MW-19I	87 Community Road	--	--	17.69	--	23.61	--	--	--	14.97	--
OU3MW-19I2	87 Community Road	--	--	16.52	--	25.34	--	--	--	14.03	--
OU3MW-20S	87 Community Road	--	--	17.56	--	--	24.56	--	--	16.55	--
OU3MW-20I	87 Community Road	--	--	17.99	--	--	21.63	--	--	15.75	--
OU3MW-20I2	87 Community Road	--	--	19.31	--	--	22.59	--	--	14.81	--
Oxidation Reduction Potential (mV)											
IO-10	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
MW-34S	OU-3 Community Road	--	--	92.00	--	--	--	--	--	--	--
MW-34I	OU-3 Community Road	--	--	310.00	--	--	--	--	--	--	--
MW-34D	OU-3 Community Road	--	--	272.00	--	--	--	--	--	--	--
MW-46WR	OU-3 Community Road	--	--	100.00	--	--	--	--	--	--	--
MW-70/70S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--

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Well ID	Oxygen Injection System	2018									
		Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--
OU3MW-07S	OU-3 Community Road	163	--	240	--	190	--	--	--	123	--
OU3MW-07I	OU-3 Community Road	243	--	228	--	215	--	--	--	365	--
OU3MW-07I2	OU-3 Community Road	280	--	262	--	234	--	--	--	250	--
OU3MW-07I3	OU-3 Community Road	298	--	274	--	223	--	--	--	331	--
OU3MW-07I4	OU-3 Community Road	--	--	214	--	177	--	--	--	186	--
OU3MW-19S	87 Community Road	--	--	155	--	83	--	--	--	82	--
OU3MW-19I	87 Community Road	--	--	224	--	189	--	--	--	284	--
OU3MW-19I2	87 Community Road	--	--	275	--	184	--	--	--	243	--
OU3MW-20S	87 Community Road	--	--	200	--	--	263	--	--	236	--
OU3MW-20I	87 Community Road	--	--	235	--	--	293	--	--	275	--
OU3MW-20I2	87 Community Road	--	--	243	--	--	228	--	--	188	--

Note:
 For wells IO-10 through

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Well ID	Oxygen Injection System	2019				2020			2021				2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
		Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
pH (SU)																	
IO-10	OU-3 Community Road	--	7.21	6.9	6.60	6.27	--	6.71	6.98	5.70	6.83	6.69	6.46	7.17	6.27	6.26	6.79
MW-34S	OU-3 Community Road	--	6.39	5.94	5.72	6.16	--	5.74	6.07	5.83	6.50	5.55	5.89	6.00	6.25	5.95	5.99
MW-34I	OU-3 Community Road	--	6.77	6.74	6.81	6.55	--	6.65	6.57	5.83	6.17	6.68	6.10	6.90	6.34	6.20	6.46
MW-34D	OU-3 Community Road	--	6.2	6.24	6.00	6.24	--	6.81	6.24	5.66	6.07	6.15	6.22	6.53	5.97	5.84	6.24
MW-46WR	OU-3 Community Road	--	5.94	6.14	5.99	5.59	--	6.12	6.60	5.70	6.47	5.94	6.05	6.44	6.03	5.78	6.23
MW-70/70S	OU-3 Community Road	--	6.17	5.81	5.77	5.57	--	5.86	6.11	6.32	5.89	5.81	--	6.46	6.07	5.85	6.05
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	5.80	5.80	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	5.90	5.56	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	6.34	6.16	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	7.53	5.94	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	7.31	6.04	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	6.57	5.89	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	5.92	5.90	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	6.00	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	5.62	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	6.51	6.00	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	5.58	5.74	--
OU3MW-07S	OU-3 Community Road	6.05	6.26	6.6	6.51	6.34	6.15	6.17	6.67	6.53	5.91	7.04	6.15	5.82	5.60	5.74	6.23
OU3MW-07I	OU-3 Community Road	6.18	6.7	7.03	6.00	6.17	6.42	6.21	6.84	6.99	6.31	7.49	6.48	6.09	6.26	6.15	6.59
OU3MW-07I2	OU-3 Community Road	5.76	6.47	6.8	5.71	6.01	6.22	5.88	6.40	6.95	6.53	7.24	6.13	5.9	5.86	6.06	6.45
OU3MW-07I3	OU-3 Community Road	5.97	6.27	6.21	6.09	5.84	5.92	5.67	6.42	6.85	7.38	7.46	5.84	5.66	NS	5.87	6.59
OU3MW-07I4	OU-3 Community Road	6.09	6.05	6.26	5.91	5.72	5.83	5.62	6.19	6.79	6.37	7.39	5.87	5.67	NS	5.80	6.33
OU3MW-19S	87 Community Road	5.80	6.31	5.98	6.13	5.60	5.81	6.18	6.30	5.61	6.14	5.91	5.84	5.94	6.22	5.72	5.96
OU3MW-19I	87 Community Road	6.07	6.61	6.26	6.11	5.89	6.13	6.40	6.76	6.15	--	6.33	6.21	6.43	6.73	6.03	6.32
OU3MW-19I2	87 Community Road	6.33	6.38	5.94	6.27	6.00	5.94	6.18	6.34	5.74	6.17	6.09	5.91	6.00	5.95	5.79	6.04
OU3MW-20S	87 Community Road	5.81	5.59	5.59	5.29	5.17	5.62	5.78	6.33	5.48	5.64	5.61	5.78	5.97	5.90	5.27	5.75
OU3MW-20I	87 Community Road	6.62	6.24	6.61	6.35	6.42	6.34	6.57	7.08	6.27	6.55	6.42	6.45	6.81	6.62	6.11	6.56
OU3MW-20I2	87 Community Road	6.13	6	6.12	5.64	5.88	5.71	6.14	6.21	5.81	6.10	5.82	5.8	6.24	5.89	5.61	5.99
Conductivity (mS/cm)																	
IO-10	OU-3 Community Road	--	0.94	0.799	0.589	0.912	--	1.62	0.851	0.458	0.455	0.667	0.830	0.497	0.413	0.530	0.61
MW-34S	OU-3 Community Road	--	0.656	0.523	0.563	0.835	--	0.543	1.16	0.724	0.622	0.545	0.52	0.701	0.643	0.759	0.60
MW-34I	OU-3 Community Road	--	1.19	0.586	0.521	0.996	--	1.8	1.04	0.295	0.379	0.912	0.705	0.521	0.409	0.502	0.63
MW-34D	OU-3 Community Road	--	6.2	0.392	0.545	0.939	--	0.09	0.485	0.271	0.313	0.327	0.296	0.531	0.295	0.615	0.37
MW-46WR	OU-3 Community Road	--	1.21	0.857	0.560	1.080	--	0.954	1.11	0.698	0.366	0.811	0.678	0.637	0.792	0.974	0.62
MW-70/70S	OU-3 Community Road	--	0.543	0.586	0.572	0.686	--	0.634	0.930	0.651	0.743	0.645	--	0.586	0.485	0.678	0.66
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.646	1.034	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.220	0.252	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.712	0.647	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.426	0.413	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.684	0.731	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.389	0.517	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.351	0.375	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	0.392	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	0.388	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.633	0.584	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.420	0.457	--
OU3MW-07S	OU-3 Community Road	0.700	1.05	0.58	1.18	1.24	0.575	0.733	0.636	0.549	0.470	0.804	0.383	0.38	0.235	0.541	0.51
OU3MW-07I	OU-3 Community Road	0.999	0.93	0.631	0.578	1.04	0.545	0.904	0.793	0.466	0.520	0.753	0.503	0.436	0.355	0.514	0.55
OU3MW-07I2	OU-3 Community Road	0.994	1.02	0.523	0.410	0.949	0.545	0.680	0.842	0.563	0.339	0.748	0.521	0.524	0.275	0.492	0.53
OU3MW-07I3	OU-3 Community Road	0.761	0.918	0.509	0.631	0.562	0.461	0.593	0.555	0.606	0.728	0.351	0.427	0.457	NS	0.414	0.49
OU3MW-07I4	OU-3 Community Road	0.301	0.661	0.36	0.750	0.447	0.393	0.439	0.492	0.464	0.290	0.405	0.498	0.383	NS	0.398	0.39
OU3MW-19S	87 Community Road	0.251	0.485	0.425	0.717	0.512	0.588	0.436	0.280	0.748	0.500	0.444	0.281	1.56	0.448	0.561	0.70
OU3MW-19I	87 Community Road	0.525	0.338	0.255	0.245	0.550	0.979	0.447	0.527	0.517	--	0.516	0.319	0.403	0.384	0.400	0.41
OU3MW-19I2	87 Community Road	0.265	0.305	0.511	0.283	0.367	0.463	0.374	0.344	0.335	0.573	0.313	0.596	0.315	0.350	0.371	0.45
OU3MW-20S	87 Community Road	0.733	0.295	1.44	2.21	1.76	1.52	2.28	1.40	0.775	1.10	1.14	0.804	1.41	0.313	0.773	1.11
OU3MW-20I	87 Community Road	0.533	0.525	0.621	0.945	0.918	0.68	0.924	0.668	0.508	0.779	0.674	0.631	0.591	0.599	0.682	0.67
OU3MW-20I2	87 Community Road	0.208	0.53	0.312	0.452	0.572	0.328	0.785	0.546	0.519	0.440	0.612	0.296	0.762	0.355	0.414	0.53
Dissolved Oxygen (mg/L)																	
IO-10	OU-3 Community Road	--	29	22	13	16	--	29	31	4	19	26	6	10	20.4	17.8	15.25
MW-34S	OU-3 Community Road	--	1	9	4	5	--	4	3	4	3	10	3	10	0.2	1.3	6.50
MW-34I	OU-3 Community Road	--	33	32	15	23	--	17	18	6	5	23	7	16	0.9	17.4	12.75
MW-34D	OU-3 Community Road	--	22	30	13	19	--	15.00	11	1.00	2	15	9	18	0.2	8.0	11.00
MW-46WR	OU-3 Community Road	--	18	17	21	29	--	16	32	8	19	22	6	22	8.7	3.6	17.25
MW-70/70S	OU-3 Community Road	--	18	18	15	20	--	11	10	8	8	18	--	10	21.6	3.4	12.00
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	22.0	23.5	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

Well ID	Oxygen Injection System	2019				2020			2021				2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
		Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	27.3	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3	1.3	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	7.0	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	2.1	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	4.0	18.3	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	6.1	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	1.8	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	1.0	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	15.8	3.7	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	9.9	13.3	--
OU3MW-07S	OU-3 Community Road	14.0	18	36	24	29	30	19	31.83	21	22	12	15	15	3.0	20.5	16.00
OU3MW-07I	OU-3 Community Road	25.0	16	29	38	22	27	20	11	10	19	19	20	15	3.2	27.4	18.25
OU3MW-07I2	OU-3 Community Road	21.0	16	33	37	23	26	25	16	7	21	20	19	16	3.3	23.3	19.00
OU3MW-07I3	OU-3 Community Road	17.0	0	15	24	26	19	22	11	13	1	3	7	12	NS	22.5	5.75
OU3MW-07I4	OU-3 Community Road	0.0	0	0	0	0	0	0.02	2	0	2	2	2	2	NS	0.9	2.00
OU3MW-19S	87 Community Road	2.0	2	16	13	3	17	2	4	3	15	13	3	2	2.0	3.7	8.25
OU3MW-19I	87 Community Road	25.0	30	28	31	19	29	26	16	10	--	22	1	17	4.0	21.1	13.33
OU3MW-19I2	87 Community Road	11.0	10	14	2	6	5	0	3	4	2	0	2	3	2.0	5.9	1.75
OU3MW-20S	87 Community Road	13.0	34	19	27	11	21	23	7	9	7	0	16	20	15.0	22.7	10.75
OU3MW-20I	87 Community Road	24.0	25	29	11	19	32	23	6	17	27	18	14	16	2.0	24.4	18.75
OU3MW-20I2	87 Community Road	1.0	22	2	0	2	1	0	1	2	2	3	2	1	2.0	4.4	2.00
Temperature (degrees Celcius)																	
IO-10	OU-3 Community Road	--	15.25	22.79	15.10	12.11	--	13.72	10.82	16.76	21.18	14.51	12.63	18.74	14.9	15.5	16.77
MW-34S	OU-3 Community Road	--	13.51	19.57	15.27	7.62	--	15.08	13.72	14.43	21.7	13.09	9.82	15.97	13.9	14.9	15.15
MW-34I	OU-3 Community Road	--	14.45	17.25	15.04	10.91	--	15.55	11.25	14.26	17.98	15.34	13.06	14.57	14.3	14.8	15.24
MW-34D	OU-3 Community Road	--	13.86	15.59	13.52	11.93	--	14.34	12.08	14.52	17.21	14.68	13.39	14.45	14.3	14.6	14.93
MW-46WR	OU-3 Community Road	--	17.63	22.23	13.98	8.87	--	12.98	10.01	20.11	24.24	12.26	9.31	20.39	15.5	16.8	16.55
MW-70/70S	OU-3 Community Road	--	13.78	21.45	13.18	9.05	--	12.7	8.59	15.29	22.29	12.87	--	16.76	13.8	15.0	17.31
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	13.9	14.2	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	13.9	13.8	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	13.6	16.0	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	11.8	15.4	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	13.2	14.8	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	13.8	15.0	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	9.9	14.9	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	14.3	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	14.2	--
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	14.4	14.7	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	14.9	14.6	--
OU3MW-07S	OU-3 Community Road	8.48	12.33	18.69	18.05	8.32	19.85	16.37	10.93	9.84	20.41	18.19	8.71	9.96	9.7	14.9	14.32
OU3MW-07I	OU-3 Community Road	10.98	13.75	16.29	15.86	10.96	16.4	16.49	14.16	10.53	19.11	17.60	12.40	11.89	11.1	15.1	15.25
OU3MW-07I2	OU-3 Community Road	11.94	14.59	19.42	15.14	11.28	16.24	16.29	14.56	11.11	18.72	16.30	12.38	12.50	12.0	14.7	14.98
OU3MW-07I3	OU-3 Community Road	6.68	14.22	16.57	14.92	12.29	15.39	15.9	9.84	12.41	19.91	15.78	12.81	12.83	NS	14.9	15.33
OU3MW-07I4	OU-3 Community Road	7.39	14.77	17.18	14.47	12.38	15.93	15.6	11.71	12.11	19.31	15.82	12.66	12.77	NS	14.3	15.14
OU3MW-19S	87 Community Road	7.23	11.95	18.44	16.83	8.92	21.47	14.01	10.47	10.67	19.90	15.97	10.64	11.74	18.0	14.0	14.56
OU3MW-19I	87 Community Road	10.24	12.91	15.42	15.64	11.53	19.8	14.58	12.95	12.88	--	15.49	13.46	13.51	15.7	14.5	14.15
OU3MW-19I2	87 Community Road	11.41	13.29	16.39	15.51	11.66	19.13	14.03	12.52	13.83	19.37	15.29	13.46	13.77	14.9	14.3	15.47
OU3MW-20S	87 Community Road	8.40	11.47	19.10	18.47	8.90	19.73	15.28	7.72	11.07	20.12	19.14	13.83	12.16	19.2	14.7	15.81
OU3MW-20I	87 Community Road	11.79	12.37	22.16	15.04	11.26	19.51	15.61	11.9	13.08	17.88	17.11	13.76	14.02	16.7	15.0	15.69
OU3MW-20I2	87 Community Road	11.89	13.02	17.14	14.13	10.28	16.73	14.75	12.99	14.2	17.85	16.09	13.41	14.42	16.1	14.4	15.44
Oxidation Reduction Potential (mV)																	
IO-10	OU-3 Community Road	--	164	167	161	223	--	152.00	265	199	168	191	176	160	47	103	174
MW-34S	OU-3 Community Road	--	-14	54	23	71	--	91	128	92	-10	36	60	136	-117	-11	56
MW-34I	OU-3 Community Road	--	184	193	159	225	--	193	225	155	225	187	136	197	-78	121	186
MW-34D	OU-3 Community Road	--	202	279	187	209	--	195.00	165	140	205	210	133	179	86	114	182
MW-46WR	OU-3 Community Road	--	60	71	106	301	--	84	199	167	138	116	155	144	-65	-21	138
MW-70/70S	OU-3 Community Road	--	62	90	74	224	--	59	194	167	52	51	--	142	-8	-23	82
OU3MW-02S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	240	178	--
OU3MW-02I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	133	227	--
OU3MW-03S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	-32	-60	--
OU3MW-03I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	-31	-10	--
OU3MW-04S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	-105	-21	--
OU3MW-04I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	-38	101	--
OU3MW-04D	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	146	120	--
OU3MW-04D2	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	137	--
OU3MW-04D3	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	NS	132	--

Appendix E - Table E-3
 Summary of Groundwater Parameter Data
 OU-3 Oxygen Injection System
 Annual Groundwater Monitoring and Operations, Maintenance & Monitoring Report
 Bay Shore/Brightwaters Former MGP Site

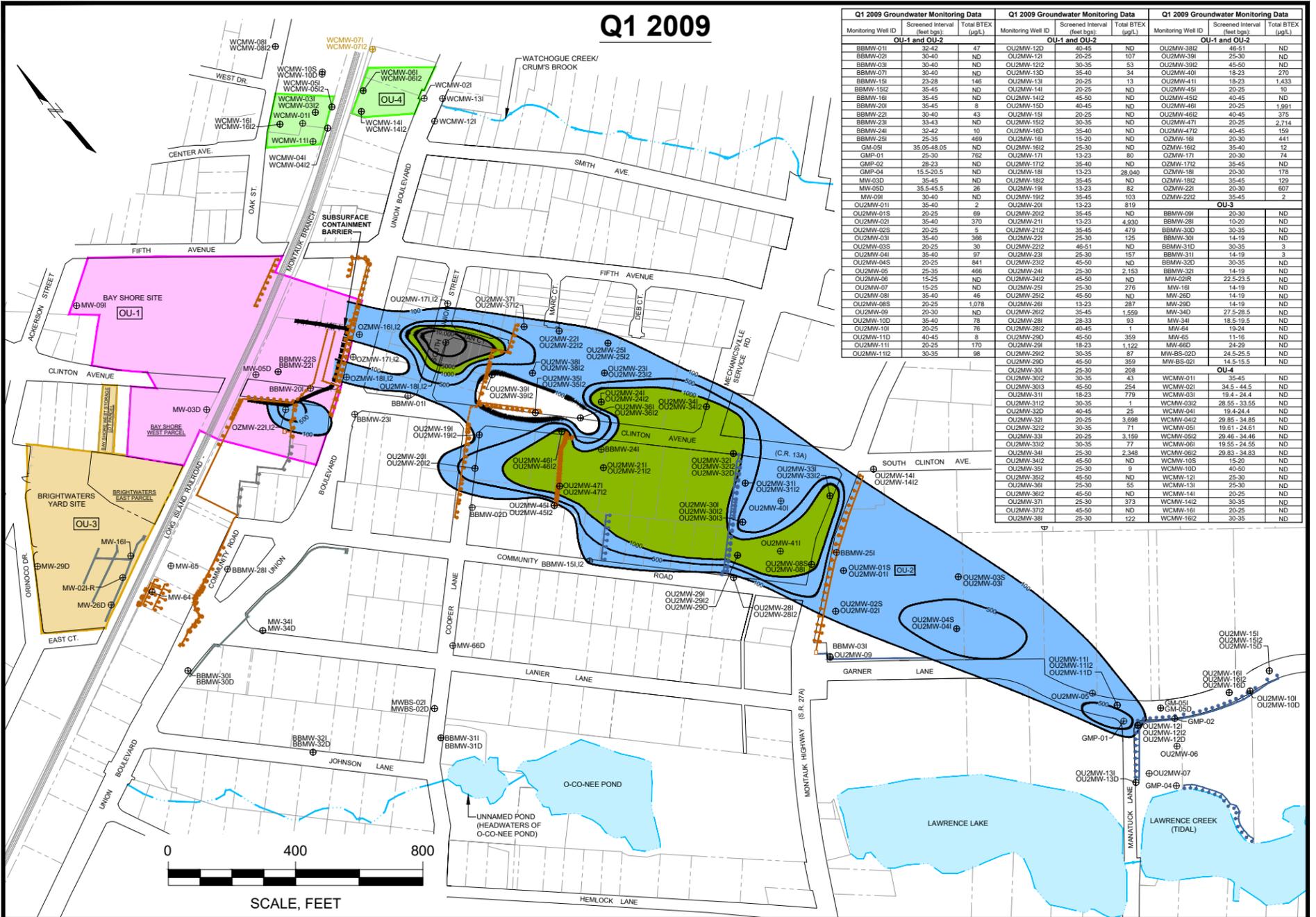
Well ID	Oxygen Injection System	2019				2020			2021				2022		Baseline Average	Historical Average	Q3 2021 - Q2 2022 Average
		Q1	Q2	Q3	Q4	Q1	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
OU3MW-05S	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	100	75	--
OU3MW-05I	OU-3 Community Road	--	--	--	--	--	--	--	--	--	--	--	--	--	113	140	--
OU3MW-07S	OU-3 Community Road	219	217	214	34	157	188	98	101	227	206	5	111	234	-139	108	139
OU3MW-07I	OU-3 Community Road	236	293	247	366	224	266	216	205	228	207	103	154	245	-56	197	177
OU3MW-07I2	OU-3 Community Road	257	317	203	368	186	287	250	215	236	196	141	177	259	18	184	193
OU3MW-07I3	OU-3 Community Road	243	332	204	237	314	269	269	284	233	158	13	196	270	NS	229	159
OU3MW-07I4	OU-3 Community Road	188	281	198	210	285	228	229	229	219	176	-1	190	248	NS	186	153
OU3MW-19S	87 Community Road	39	88	30	30	46	75	-6	60	119	26	-32	-21	161	-60	4	34
OU3MW-19I	87 Community Road	219	170	272	319	209	198	186	163	207	--	173	127	300	-92	169	200
OU3MW-19I2	87 Community Road	253	186	209	188	267	231	189	190	225	194	158	146	314	88	178	203
OU3MW-20S	87 Community Road	226	220	226	252	243	230	189	229	252	159	-9	137	305	97	187	148
OU3MW-20I	87 Community Road	217	193	215	172	245	222	122	248	247	246	152	102	293	-112	181	198
OU3MW-20I2	87 Community Road	187	228	233	181	186	223	137	169	230	250	158	146	289	80	176	211

1 MWBS-02D the baseline average does not reflect data from before a system was turned on, but data from when the OU-3 Union Boulevard System was in operation.

Appendix F

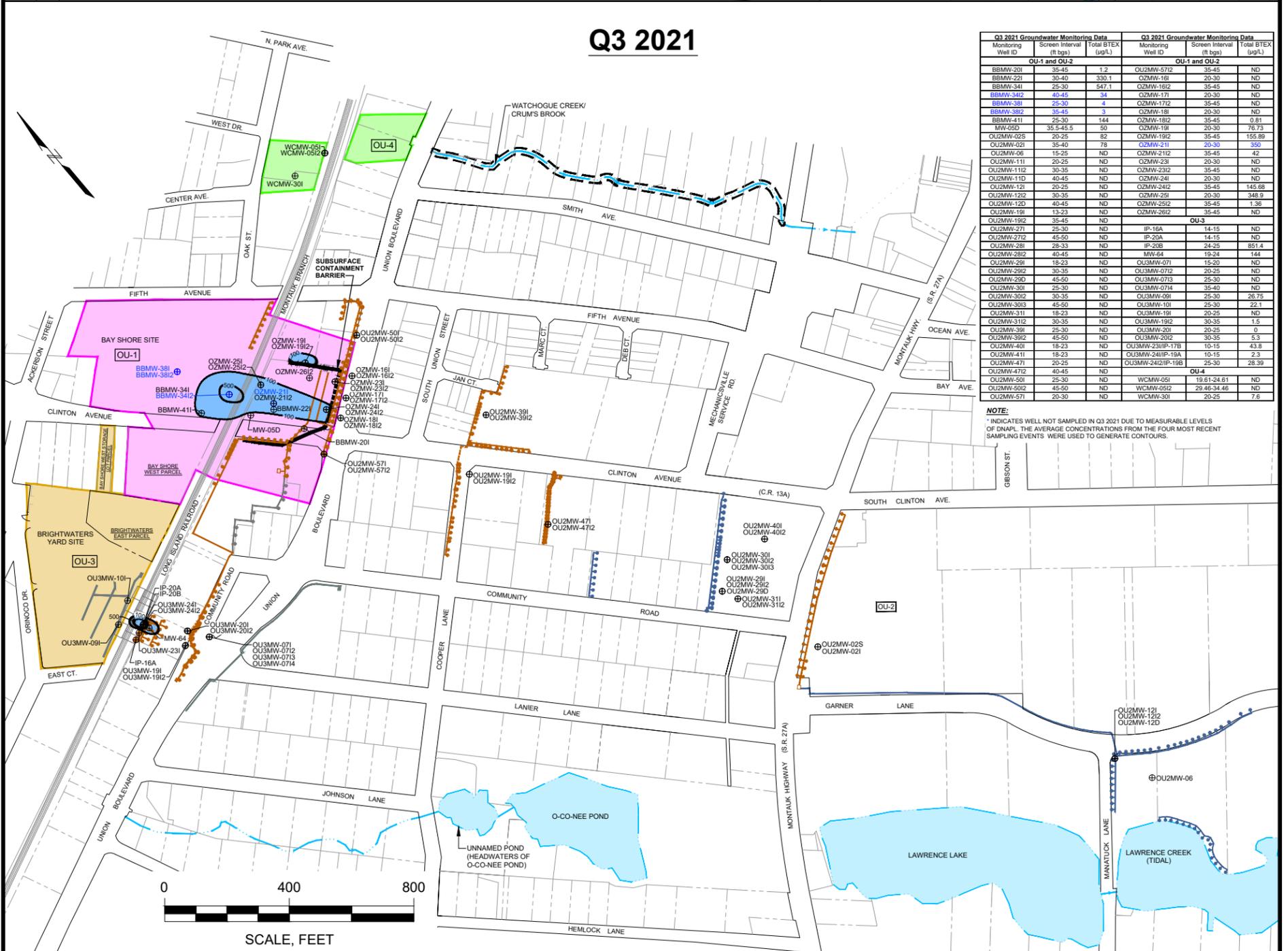
Recent Iso-Concentration Maps –Q3 2021, Q4 2021, Q1 2022

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2			OU-1 and OU-2		
BBMW-011	32-42	47	OU2MW-12D	20-25	ND	OU2MW-38I2	49-51	ND
BBMW-02	30-40	ND	OU2MW-12	20-25	107	OU2MW-39	25-30	ND
BBMW-03	30-40	ND	OU2MW-12I2	30-35	53	OU2MW-39I2	45-50	ND
BBMW-07	30-40	ND	OU2MW-13D	35-40	34	OU2MW-40	19-23	270
BBMW-15	23-28	146	OU2MW-13	20-25	13	OU2MW-41	18-23	1,433
BBMW-15I2	35-45	ND	OU2MW-14	20-25	ND	OU2MW-45	20-25	10
BBMW-16	35-45	ND	OU2MW-14I2	45-50	ND	OU2MW-45I2	40-45	ND
BBMW-20	38-45	8	OU2MW-15	40-45	ND	OU2MW-46	20-25	1,991
BBMW-22	30-40	43	OU2MW-15I	20-25	ND	OU2MW-46I2	40-45	375
BBMW-23	33-43	ND	OU2MW-15I2	30-35	ND	OU2MW-47	20-25	2,714
BBMW-24	32-42	10	OU2MW-16	40-45	ND	OU2MW-47I2	40-45	159
BBMW-28	28-35	469	OU2MW-16I	15-20	ND	OU2MW-48	20-30	441
GM-05I	35.05-48.05	ND	OU2MW-16I2	25-30	ND	OU2MW-16I2	35-40	12
GMP-01	25-30	762	OU2MW-17	13-23	80	OU2MW-17	20-30	74
GMP-02	28-33	ND	OU2MW-17I2	35-40	ND	OU2MW-17I2	35-45	ND
GMP-04	15.5-20.5	ND	OU2MW-18	13-23	28,040	OU2MW-18	20-30	178
MW-03D	35-45	ND	OU2MW-18I2	35-45	ND	OU2MW-18I2	35-45	129
MW-05D	35.5-45.5	26	OU2MW-19	13-23	82	OU2MW-22	20-30	607
MW-09	30-40	ND	OU2MW-19I2	35-45	103	OU2MW-22I2	35-45	2
OU2MW-011	35-40	2	OU2MW-20	13-23	819	OU-3		
OU2MW-015	20-25	69	OU2MW-20I2	35-45	ND	BBMW-09	20-30	ND
OU2MW-021	35-40	370	OU2MW-21	13-23	4,930	BBMW-28	10-20	ND
OU2MW-025	20-25	5	OU2MW-21I2	35-45	479	BBMW-30D	30-35	ND
OU2MW-03	35-40	366	OU2MW-22	25-30	125	BBMW-30	14-19	ND
OU2MW-03S	20-25	30	OU2MW-22I2	46-51	ND	BBMW-31D	30-35	3
OU2MW-04	35-40	97	OU2MW-23	25-30	157	BBMW-31	14-19	3
OU2MW-04S	20-25	841	OU2MW-23I2	45-50	ND	BBMW-32D	30-35	ND
OU2MW-05	25-35	466	OU2MW-24	25-30	2,153	BBMW-32	14-19	ND
OU2MW-06	15-25	ND	OU2MW-24I2	45-50	ND	MW-02R	22.5-23.5	ND
OU2MW-07	15-25	ND	OU2MW-25	25-30	276	MW-18	14-19	ND
OU2MW-08	35-40	46	OU2MW-25I2	40-45	ND	MW-26D	14-19	ND
OU2MW-08S	20-25	1,078	OU2MW-26	13-23	287	MW-29D	14-19	ND
OU2MW-09	20-30	ND	OU2MW-26I2	35-45	1,559	MW-34D	27.5-28.5	ND
OU2MW-10D	35-40	78	OU2MW-28	25-33	93	MW-34	18.5-19.5	ND
OU2MW-10	20-25	76	OU2MW-28I2	40-45	1	MW-64	19-24	ND
OU2MW-11D	40-45	8	OU2MW-29D	45-50	359	MW-65	11-16	ND
OU2MW-11	20-25	170	OU2MW-29	18-23	1,122	MW-66D	24-29	ND
OU2MW-11I2	30-35	98	OU2MW-29I2	30-35	87	MW-65D	24.5-25.5	ND
			OU2MW-30D	45-50	359	MW-65I2	14.5-15.5	ND
			OU2MW-30	25-30	208	OU-4		
			OU2MW-30I2	30-35	43	WCMW-011	35-45	ND
			OU2MW-30I3	45-50	264	WCMW-012	34.5-44.5	ND
			OU2MW-31	18-23	779	WCMW-03	19.4-24.4	ND
			OU2MW-31I2	30-35	1	WCMW-03I2	28.55-33.55	ND
			OU2MW-32D	40-45	25	WCMW-04	19-24.4	ND
			OU2MW-32	20-25	3,698	WCMW-04I2	29.85-34.85	ND
			OU2MW-32I2	30-35	71	WCMW-05	19.61-24.61	ND
			OU2MW-33	20-25	3,159	WCMW-05I2	20.46-34.46	ND
			OU2MW-33I2	30-35	77	WCMW-06	19.55-24.55	ND
			OU2MW-34	25-30	2,348	WCMW-06I2	29.83-34.83	ND
			OU2MW-34I2	45-50	ND	WCMW-10S	15-20	ND
			OU2MW-35	25-30	9	WCMW-10D	40-50	ND
			OU2MW-35I2	45-50	ND	WCMW-12	25-30	ND
			OU2MW-36	25-30	55	WCMW-13	25-30	ND
			OU2MW-36I2	45-50	ND	WCMW-14	20-25	ND
			OU2MW-37	25-30	373	WCMW-14I2	30-35	ND
			OU2MW-37I2	45-50	ND	WCMW-16	20-25	ND
			OU2MW-38	25-30	122	WCMW-18I2	39-55	ND

Q3 2021



Q3 2021 Groundwater Monitoring Data			Q3 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2		
BBMW-20	35-45	1.2	OU2MW-57I2	30-45	ND
BBMW-22	30-40	330.1	OU2MW-58	20-30	ND
BBMW-34	25-30	547.1	OU2MW-16I2	35-45	ND
BBMW-34I2	40-45	34	OZMW-17	20-30	ND
BBMW-38	25-30	4	OZMW-17I2	35-45	ND
BBMW-39	35-45	3	OZMW-18	20-30	ND
BBMW-41	25-30	144	OZMW-18I2	35-45	0.81
MW-05D	35.5-45.5	50	OZMW-19	20-30	76.73
OU2MW-02S	20-25	82	OZMW-19I2	35-45	155.89
OU2MW-02I	35-40	78	OZMW-21	20-30	359
OU2MW-06	15-25	ND	OZMW-21I2	35-45	42
OU2MW-11	20-25	ND	OZMW-23	20-30	ND
OU2MW-11I2	30-35	ND	OZMW-23I2	35-45	ND
OU2MW-11D	40-45	ND	OZMW-24	20-30	ND
OU2MW-12	20-25	ND	OZMW-24I2	35-45	145.68
OU2MW-12I2	30-35	ND	OZMW-25	20-30	348.9
OU2MW-12D	40-45	ND	OZMW-25I2	35-45	1.36
OU2MW-18	13-23	ND	OU2MW-26I2	35-45	ND
OU2MW-19I2	35-45	ND	OU-3		
OU2MW-27	25-30	ND	IP-16A	14-15	ND
OU2MW-27I2	45-50	ND	IP-20A	14-15	ND
OU2MW-28	28-33	ND	IP-20B	24-25	851.4
OU2MW-28I2	40-45	ND	MW-64	19-24	148
OU2MW-29	18-23	ND	OU3MW-07	20-25	ND
OU2MW-29I2	30-35	ND	OU3MW-07I2	20-25	ND
OU2MW-29D	45-50	ND	OU3MW-07I3	25-30	ND
OU2MW-30	25-30	ND	OU3MW-07A	35-40	ND
OU2MW-30I2	30-35	ND	OU3MW-09	25-30	28.75
OU2MW-30I3	45-50	ND	OU3MW-10	25-30	22.1
OU2MW-31	18-23	ND	OU3MW-10I	20-25	ND
OU2MW-31I2	30-35	ND	OU3MW-10I2	30-35	1.5
OU2MW-31I3	45-50	ND	OU3MW-20	20-25	0
OU2MW-39I2	45-50	ND	OU3MW-20I2	30-35	5.3
OU2MW-40	18-23	ND	OU3MW-23IP-17B	10-15	43.8
OU2MW-41	18-23	ND	OU3MW-24IP-19A	10-15	2.3
OU2MW-41I	20-25	ND	OU3MW-24IP-19B	15-20	28.30
OU2MW-47I2	40-45	ND	OU-4		
OU2MW-50	25-30	ND	WCMW-05	19.61-24.61	ND
OU2MW-50I2	45-50	ND	WCMW-05I2	29.46-34.46	ND
OU2MW-57	20-30	ND	WCMW-06	20-25	7.6

NOTE: * INDICATES WELL NOT SAMPLED IN Q3 2021 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- ΦBBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION WELL NOT SAMPLED IN Q1 2019 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- BTEX ≥ 100 µg/L
- BTEX ≥ 1,000 µg/L
- BTEX ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L) BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

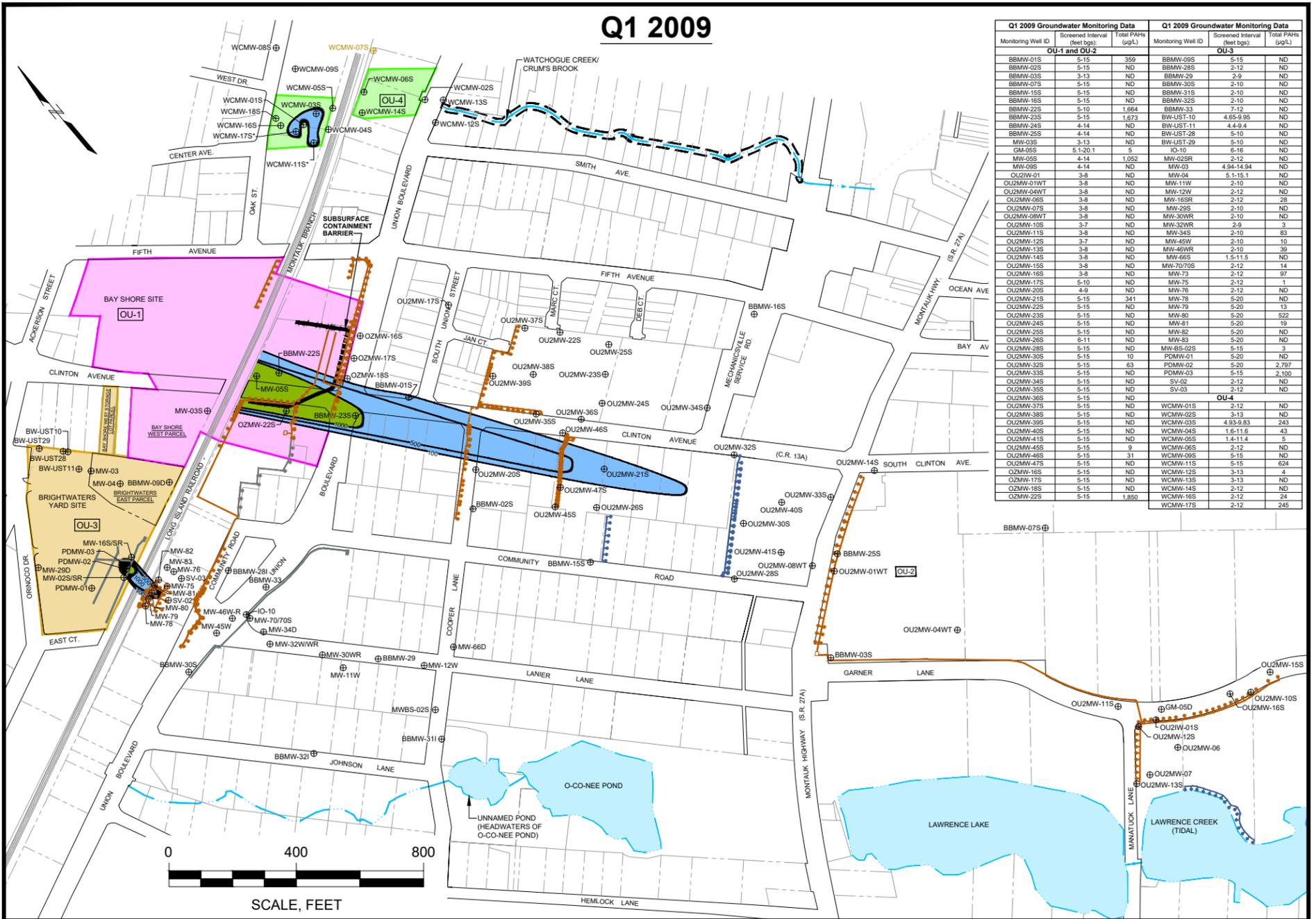
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INTERMEDIATE GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(10-50 FEET BGS)

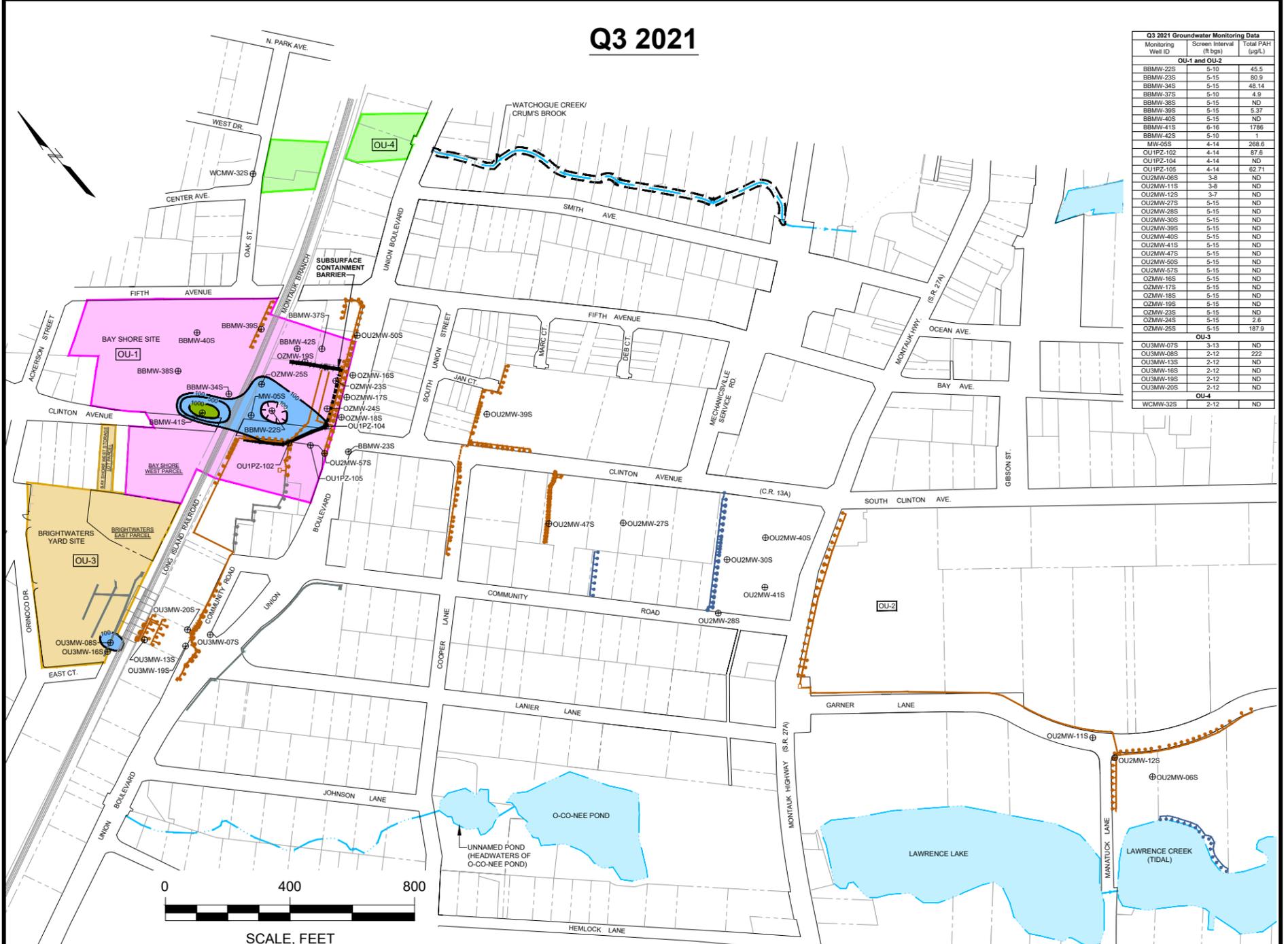
Project 1905774 February 2022 Fig. 5

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2			OU-3		
BBMW-01S	5-15	359	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-15S	5-15	ND	BBMW-31S	2-10	ND
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	1,664	BBMW-33	7-12	ND
BBMW-23S	5-15	1,673	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
MW-03S	3-13	ND	BW-UST-29	5-10	ND
GM-05S	5.1-20.1	5	IO-10	6-16	ND
MW-05S	4-14	1,052	MW-02SR	2-12	ND
MW-06S	4-14	ND	MW-03	4.94-14.94	ND
OUMW-01	3-8	ND	MW-04	5-15.1	ND
OUMW-01WT	3-8	ND	MW-11W	2-10	ND
OUMW-04WT	3-8	ND	MW-12W	2-12	ND
OUMW-06S	3-8	ND	MW-15SR	2-12	28
OUMW-07S	3-8	ND	MW-29S	2-10	ND
OUMW-08WT	3-8	ND	MW-30WR	2-10	ND
OUMW-10S	3-7	ND	MW-32WR	2-9	3
OUMW-11S	3-8	ND	MW-34S	2-10	83
OUMW-12S	3-7	ND	MW-45W	2-10	10
OUMW-13S	3-8	ND	MW-46WR	2-10	39
OUMW-14S	3-8	ND	MW-66S	1.5-11.5	ND
OUMW-15S	3-8	ND	MW-70/70S	2-12	14
OUMW-16S	3-8	ND	MW-73	2-12	97
OUMW-17S	5-10	ND	MW-75	2-12	1
OUMW-20S	4-9	ND	MW-76	2-12	ND
OUMW-21S	5-15	341	MW-78	5-20	ND
OUMW-22S	5-15	ND	MW-79	5-20	13
OUMW-23S	5-15	ND	MW-80	5-20	522
OUMW-24S	5-15	ND	MW-81	5-20	19
OUMW-25S	5-15	ND	MW-82	5-20	ND
OUMW-26S	6-11	ND	MW-83	5-20	ND
OUMW-28S	5-15	ND	MW-BS-02S	5-15	3
OUMW-30S	5-15	10	PDMW-01	5-20	ND
OUMW-32S	5-15	63	PDMW-02	5-20	2,797
OUMW-33S	5-15	ND	PDMW-03	5-15	2,100
OUMW-34S	5-15	ND	SV-02	2-12	ND
OUMW-35S	5-15	ND	SV-03	2-12	ND
OUMW-36S	5-15	ND	OU-4		
OUMW-37S	5-15	ND	WCMW-01S	2-12	ND
OUMW-38S	5-15	ND	WCMW-02S	3-13	ND
OUMW-39S	5-15	ND	WCMW-03S	4.93-9.93	243
OUMW-40S	5-15	ND	WCMW-04S	1.5-11.5	43
OUMW-41S	5-15	ND	WCMW-05S	1.4-11.4	5
OUMW-45S	5-15	9	WCMW-06S	2-12	ND
OUMW-46S	5-15	31	WCMW-06S	5-15	5
OUMW-47S	5-15	ND	WCMW-11S	5-15	824
OUMW-16S	5-15	ND	WCMW-12S	3-13	4
OUMW-17S	5-15	ND	WCMW-13S	3-13	ND
OUMW-18S	5-15	ND	WCMW-14S	2-12	24
OUMW-22S	5-15	1,850	WCMW-16S	2-12	24
			WCMW-17S	2-12	245

Q3 2021



Q3 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	45.5
BBMW-23S	5-15	80.9
BBMW-34S	5-15	48.14
BBMW-37S	5-10	4.9
BBMW-38S	5-15	ND
BBMW-39S	5-15	5.37
BBMW-40S	5-15	ND
BBMW-41S	6-16	1786
BBMW-42S	5-10	1
MW-35S	4-14	268.8
OUPZ-102	4-14	87.6
OUPZ-104	4-14	ND
OUPZ-105	4-14	62.71
OUMW-06S	3-8	ND
OUMW-11S	3-8	ND
OUMW-12S	3-7	ND
OUMW-27S	5-15	ND
OUMW-28S	5-15	ND
OUMW-30S	5-15	ND
OUMW-39S	5-15	ND
OUMW-40S	5-15	ND
OUMW-41S	5-15	ND
OUMW-47S	5-15	ND
OUMW-50S	5-15	ND
OUMW-57S	5-15	ND
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	ND
OZMW-19S	5-15	ND
OZMW-23S	5-15	ND
OZMW-24S	5-15	2.6
OZMW-25S	5-15	187.9
OU-3		
OUMW-07S	3-13	ND
OUMW-08S	2-12	222
OUMW-13S	3-12	ND
OUMW-16S	2-12	ND
OUMW-19S	2-12	ND
OUMW-20S	2-12	ND
OU-4		
WCMW-32S	2-12	ND

LEGEND:

- BBMW-33: EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L: MICROGRAMS PER LITER
- PAH: POLYCYCLIC AROMATIC HYDROCARBONS
- Blue shaded area: TOTAL PAH ≥ 100 µg/L
- Green shaded area: TOTAL PAH ≥ 1,000 µg/L
- Orange dashed line: OXYGEN INJECTION LINE - INSTALLED
- Blue dashed line: OXYGEN INJECTION LINE - SHUT OFF
- Grey dashed line: OXYGEN INJECTION LINE - ABANDONED
- Black dashed line: ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

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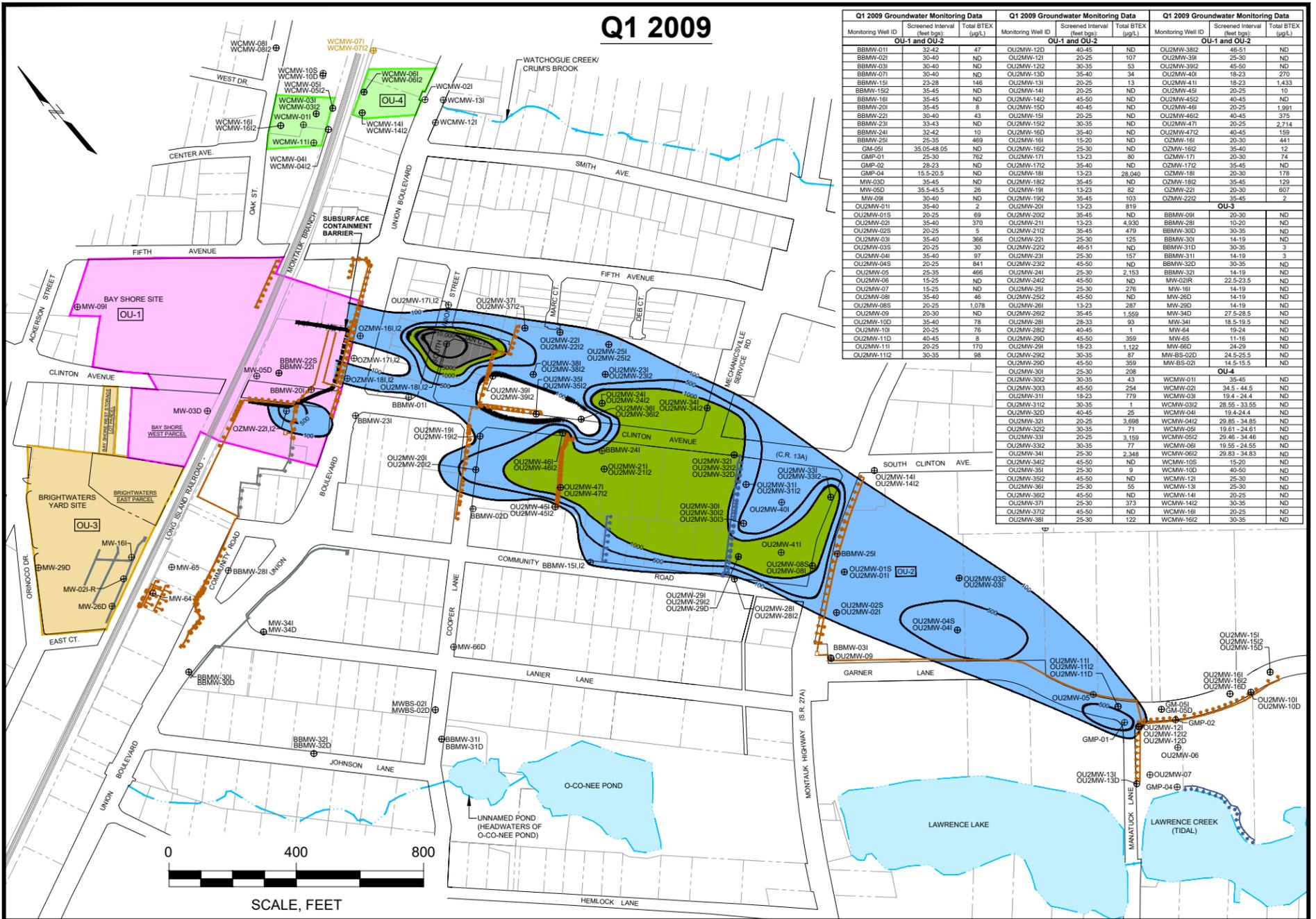
Project 1905774

WATER TABLE GROUNDWATER
TOTAL PAH
ISO-CONCENTRATION MAPS
(0-10 FEET BGS)

February 2022

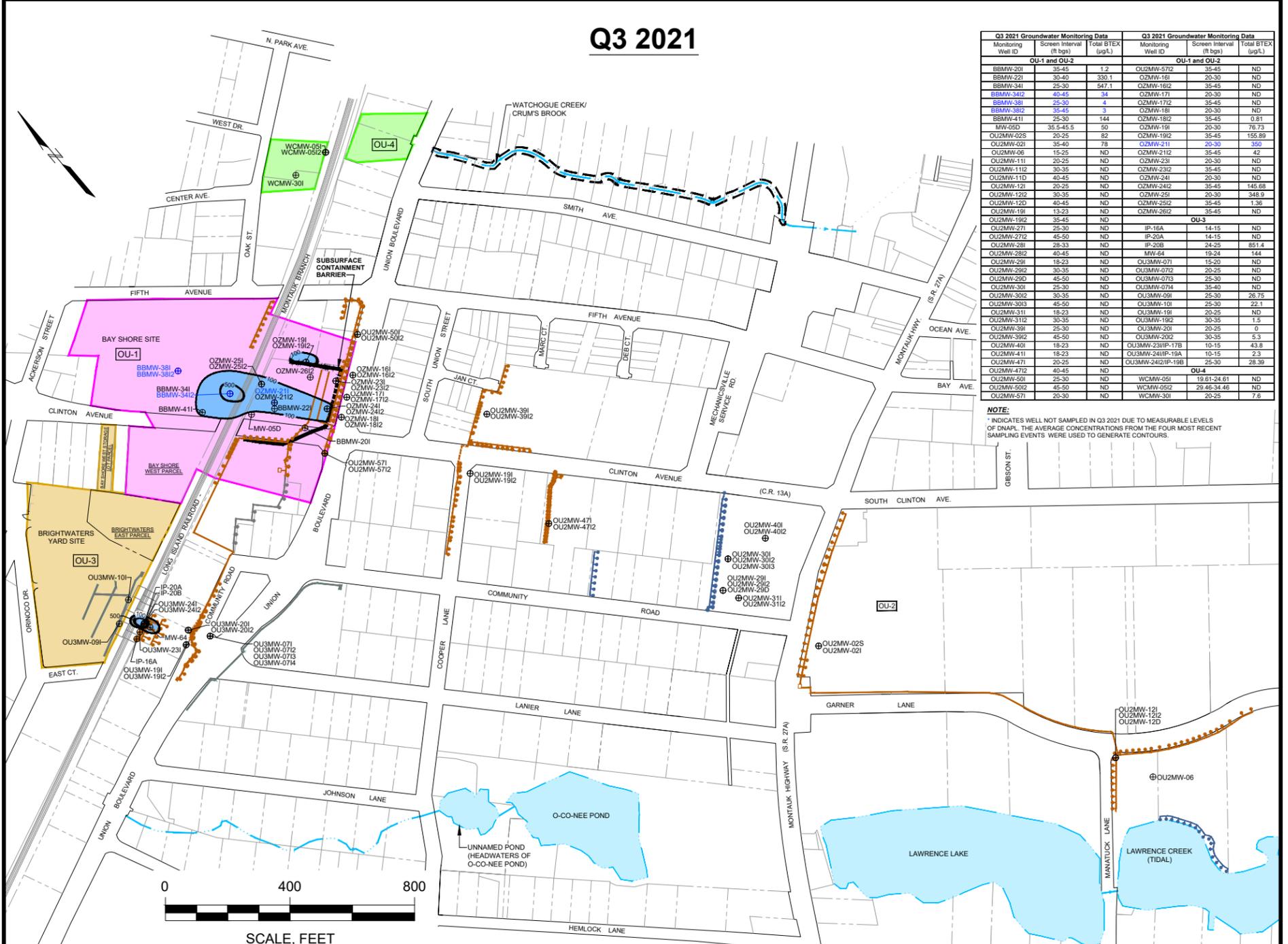
Fig. 4

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2			OU-1 and OU-2		
BBMW-011	32-42	47	OU2MW-12D	40-45	ND	OU2MW-38I2	46-51	ND
BBMW-021	30-40	ND	OU2MW-121	20-25	107	OU2MW-38I	25-30	ND
BBMW-031	30-40	ND	OU2MW-122	30-35	53	OU2MW-39I2	45-50	ND
BBMW-071	30-40	ND	OU2MW-130	35-40	34	OU2MW-40I	19-23	270
BBMW-151	23-28	146	OU2MW-131	20-25	13	OU2MW-41I	18-23	1,433
BBMW-152	35-45	ND	OU2MW-141	20-25	ND	OU2MW-45I	20-25	10
BBMW-161	35-45	ND	OU2MW-142	45-50	ND	OU2MW-46I	40-45	ND
BBMW-201	35-45	8	OU2MW-150	40-45	ND	OU2MW-46I	20-25	1,991
BBMW-221	30-40	43	OU2MW-151	20-25	ND	OU2MW-46I2	40-45	375
BBMW-231	33-43	ND	OU2MW-152	30-35	ND	OU2MW-47I	20-25	2,714
BBMW-241	32-42	10	OU2MW-160	35-40	ND	OU2MW-47I2	40-45	159
BBMW-251	25-35	469	OU2MW-161	15-20	ND	OU2MW-161	20-30	441
GM-05I	35.05-48.05	ND	OU2MW-162	25-30	ND	OU2MW-162	35-40	12
GMP-01	25-30	782	OU2MW-171	13-23	80	OU2MW-171	20-30	74
GMP-02	28-33	ND	OU2MW-172	35-40	ND	OU2MW-172	35-45	ND
GMP-04	15.5-20.5	ND	OU2MW-181	13-23	28,040	OU2MW-181	20-30	178
MW-03D	35-45	ND	OU2MW-182	35-45	ND	OU2MW-182	35-45	129
MW-05D	35.5-45.5	26	OU2MW-191	13-23	82	OU2MW-221	20-30	607
MW-09	30-40	ND	OU2MW-192	35-45	103	OU2MW-232	35-45	2
OU2MW-011	35-40	2	OU2MW-201	13-23	819	OU-3		
OU2MW-018	20-25	69	OU2MW-202	35-45	ND	BBMW-091	20-30	ND
OU2MW-021	35-40	370	OU2MW-211	13-23	4,930	BBMW-281	10-20	ND
OU2MW-025	20-25	5	OU2MW-212	35-45	479	BBMW-30D	30-35	ND
OU2MW-031	35-40	366	OU2MW-221	25-30	125	BBMW-30I	14-19	ND
OU2MW-035	20-25	30	OU2MW-232	46-51	ND	BBMW-31D	30-35	3
OU2MW-041	35-40	97	OU2MW-231	25-30	157	BBMW-31I	14-19	3
OU2MW-045	20-25	841	OU2MW-232	45-50	ND	BBMW-32D	30-35	ND
OU2MW-051	25-35	466	OU2MW-241	25-30	2,153	BBMW-32I	14-19	ND
OU2MW-061	15-25	ND	OU2MW-242	45-50	ND	MW-02R	22.5-23.5	ND
OU2MW-071	15-25	ND	OU2MW-251	25-30	276	MW-191	14-19	ND
OU2MW-081	35-40	46	OU2MW-252	45-50	ND	MW-26D	14-19	ND
OU2MW-085	20-25	1,078	OU2MW-261	13-23	287	MW-26D	14-19	ND
OU2MW-091	20-30	ND	OU2MW-262	35-45	1,569	MW-34D	27.5-28.5	ND
OU2MW-10D	35-40	78	OU2MW-281	28-33	93	MW-34I	18.5-19.5	ND
OU2MW-10I	20-25	76	OU2MW-282	40-45	1	MW-44	19-24	ND
OU2MW-11D	40-45	8	OU2MW-29D	45-50	359	MW-65	11-16	ND
OU2MW-11I	20-25	170	OU2MW-291	18-23	1,122	MW-65D	24-29	ND
OU2MW-112	30-35	98	OU2MW-292	30-35	87	MW-65D-02D	24.5-25.5	ND
			OU2MW-29D	45-50	359	MW-65I-02I	14.5-15.5	ND
			OU2MW-301	25-30	208	OU-4		
			OU2MW-302	30-35	43	WCMW-011	35-45	ND
			OU2MW-303	45-50	254	WCMW-021	34.5-44.5	ND
			OU2MW-311	18-23	779	WCMW-031	19.4-24.4	ND
			OU2MW-312	30-35	1	WCMW-032	28.55-33.55	ND
			OU2MW-32D	40-45	25	WCMW-041	19-24.4	ND
			OU2MW-321	20-25	3,698	WCMW-042	29.85-34.85	ND
			OU2MW-322	30-35	71	WCMW-051	19.61-24.61	ND
			OU2MW-331	20-25	3,159	WCMW-052	29.46-34.46	ND
			OU2MW-332	30-35	77	WCMW-061	19.55-24.55	ND
			OU2MW-341	25-30	2,348	WCMW-062	29.61-34.61	ND
			OU2MW-342	45-50	ND	WCMW-10S	15-20	ND
			OU2MW-351	25-30	9	WCMW-10D	40-50	ND
			OU2MW-352	45-50	ND	WCMW-121	25-30	ND
			OU2MW-361	25-30	59	WCMW-131	25-30	ND
			OU2MW-362	45-50	ND	WCMW-141	20-25	ND
			OU2MW-371	25-30	373	WCMW-142	30-35	ND
			OU2MW-372	45-50	ND	WCMW-181	20-25	ND
			OU2MW-381	25-30	122	WCMW-192	30-35	ND

Q3 2021



Q3 2021 Groundwater Monitoring Data			Q3 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2		
BBMW-201	35-45	1.2	OU2MW-512	35-45	ND
BBMW-221	30-40	330.1	OU2MW-161	20-30	ND
BBMW-341	25-30	547.1	OU2MW-182	35-45	ND
BBMW-342	40-45	34	OZMW-171	20-30	ND
BBMW-381	25-30	4	OZMW-172	35-45	ND
BBMW-382	40-45	3	OZMW-181	20-30	ND
BBMW-411	25-30	144	OZMW-182	35-45	0.81
MW-05D	35.5-45.5	50	OZMW-191	20-30	78.73
OU2MW-02S	20-25	82	OZMW-192	35-45	155.89
OU2MW-021	35-40	78	OZMW-211	20-30	359
OU2MW-061	15-25	ND	OZMW-212	35-45	42
OU2MW-111	20-25	ND	OZMW-231	20-30	ND
OU2MW-112	30-35	ND	OZMW-232	35-45	ND
OU2MW-11D	40-45	ND	OZMW-241	20-30	ND
OU2MW-121	20-25	ND	OZMW-242	35-45	145.68
OU2MW-122	30-35	ND	OZMW-251	20-30	348.9
OU2MW-12D	40-45	ND	OZMW-252	35-45	1.36
OU2MW-181	13-23	ND	OZMW-262	35-45	ND
OU2MW-192	35-45	ND	OU-3		
OU2MW-271	25-30	ND	IP-16A	14-15	ND
OU2MW-272	45-50	ND	IP-20A	14-15	ND
OU2MW-281	28-33	ND	IP-20B	24-25	851.4
OU2MW-282	40-45	ND	MW-44	19-24	144
OU2MW-291	18-23	ND	OU3MW-071	15-20	ND
OU2MW-292	30-35	ND	OU3MW-072	20-25	ND
OU2MW-29D	45-50	ND	OU3MW-073	25-30	ND
OU2MW-301	25-30	ND	OU3MW-074	35-40	ND
OU2MW-302	35-45	ND	OU3MW-091	25-30	25.75
OU2MW-303	45-50	ND	OU3MW-101	25-30	22.1
OU2MW-311	18-23	ND	OU3MW-191	20-25	ND
OU2MW-312	30-35	ND	OU3MW-192	30-35	1.5
OU2MW-321	25-30	ND	OU3MW-201	25-30	0
OU2MW-392	45-50	ND	OU3MW-202	30-35	5.3
OU2MW-401	18-23	ND	OU3MW-231P-17B	10-15	43.8
OU2MW-411	18-23	ND	OU3MW-241P-19A	10-15	2.3
OU2MW-471	20-25	ND	OU3MW-2421P-19B	15-30	28.39
OU2MW-472	40-45	ND	OU-4		
OU2MW-501	25-30	ND	WCMW-051	19.61-24.61	ND
OU2MW-502	45-50	ND	WCMW-052	29.46-34.46	ND
OU2MW-571	20-30	ND	WCMW-301	20-25	7.8

NOTE:
 * INDICATES WELL NOT SAMPLED IN Q3 2021 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE COUNTOURS.

LEGEND:

- ⊕ BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION WELL NOT SAMPLED IN Q1 2019 DUE TO MEASURABLE LEVELS OF DNAPL
- ⊕ BBMW-381 MICROGRAMS PER LITER
- BTEX ≥ 100 µg/L
- BTEX ≥ 1,000 µg/L
- BTEX ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L) BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE

NOTE:
 WINDOW SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters Former MGP Site Bay Shore, New York

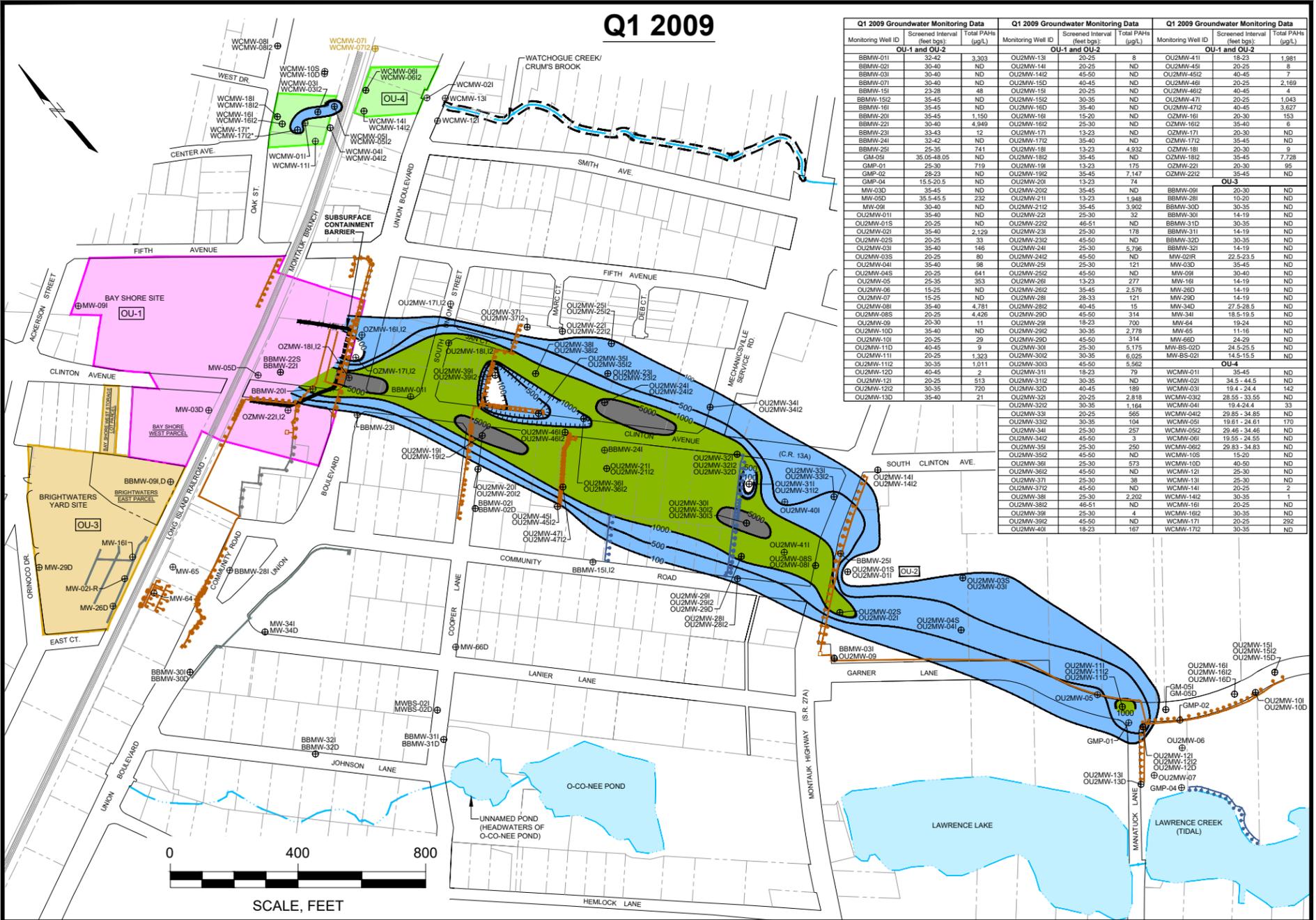
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Project 1905774 February 2022 Fig. 5

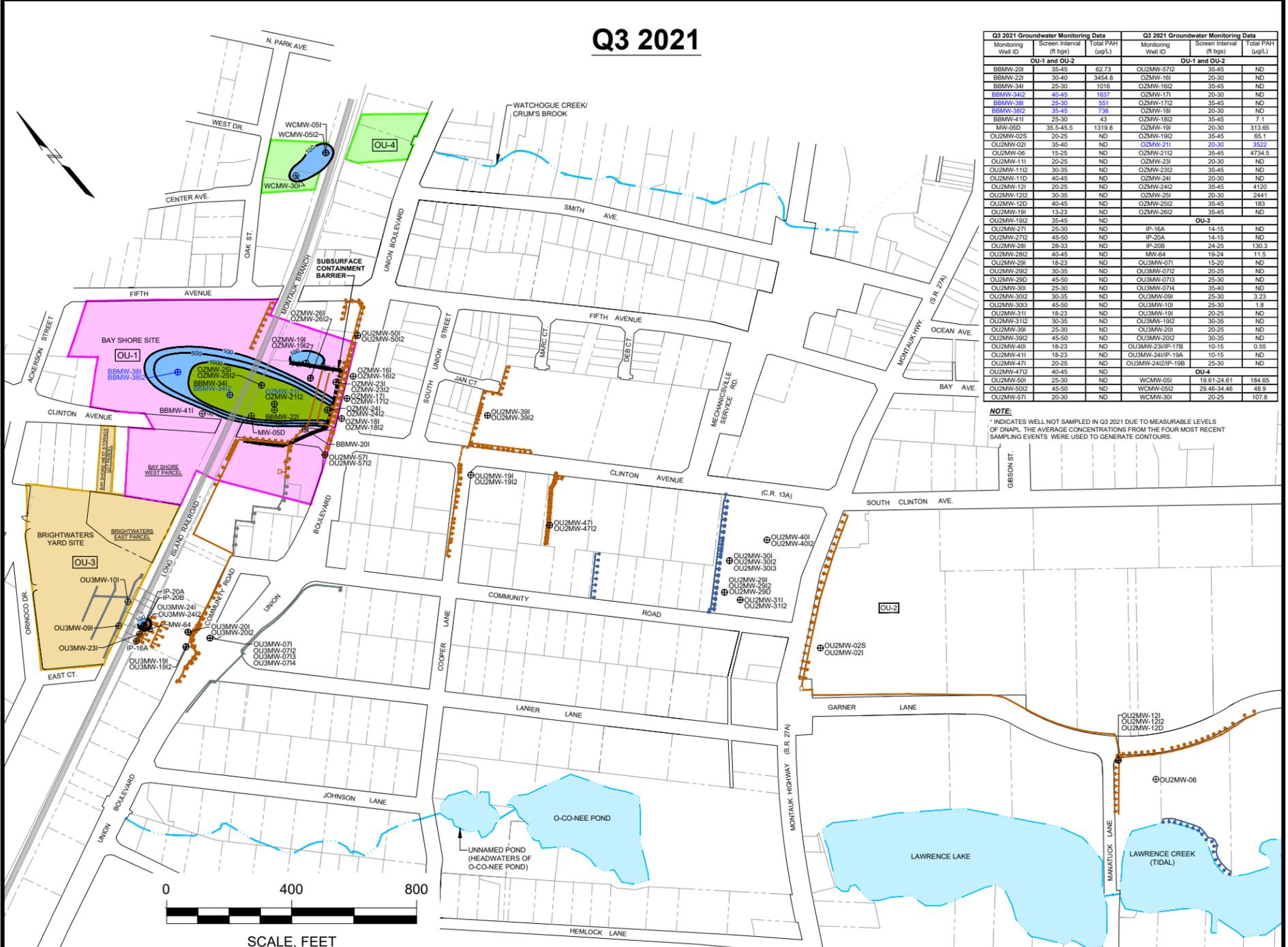
INTERMEDIATE GROUNDWATER TOTAL BTEX ISO-CONCENTRATION MAPS (10-50 FEET BGS)

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2			OU-1 and OU-2			OU-1 and OU-2		
BBMW-011	32-42	3,303	OU2MW-131	20-25	8	OU2MW-411	18-23	1,981
BBMW-021	30-40	ND	OU2MW-141	20-25	ND	OU2MW-421	20-25	7
BBMW-031	30-40	ND	OU2MW-142	45-50	ND	OU2MW-431	40-45	7
BBMW-071	30-40	ND	OU2MW-150	40-45	ND	OU2MW-461	20-25	2,169
BBMW-151	23-28	48	OU2MW-151	20-25	ND	OU2MW-462	40-45	4
BBMW-152	35-45	ND	OU2MW-152	30-35	ND	OU2MW-471	20-25	1,043
BBMW-161	35-45	ND	OU2MW-161	35-40	ND	OU2MW-472	40-45	3,627
BBMW-201	35-45	1,150	OU2MW-162	15-20	ND	OU2MW-161	20-30	153
BBMW-221	30-40	4,949	OU2MW-182	25-30	ND	OU2MW-162	35-40	6
BBMW-231	33-43	12	OU2MW-171	13-23	ND	OU2MW-171	20-30	ND
BBMW-241	32-42	ND	OU2MW-172	35-40	ND	OU2MW-172	35-45	ND
BBMW-251	25-35	741	OU2MW-181	13-23	4,932	OU2MW-181	20-30	9
GM-051	35.05-48.05	ND	OU2MW-182	35-45	ND	OU2MW-182	35-45	7,728
GMP-01	25-30	719	OU2MW-191	13-23	175	OU2MW-221	20-30	95
GMP-02	28-33	ND	OU2MW-192	35-45	7,147	OU2MW-222	35-45	292
GMP-04	15.5-20.5	ND	OU2MW-201	13-23	74	OU-3		
MW-03D	35-45	ND	OU2MW-202	35-45	ND	BBMW-091	20-30	ND
MW-05D	35.5-45.5	232	OU2MW-211	13-23	1,948	BBMW-091	10-30	ND
MW-09	30-40	ND	OU2MW-212	35-45	3,902	BBMW-30D	30-35	ND
OU2MW-011	35-40	ND	OU2MW-221	25-30	32	BBMW-301	14-19	ND
OU2MW-015	20-25	ND	OU2MW-222	46-51	ND	BBMW-31D	30-35	ND
OU2MW-021	35-40	2,129	OU2MW-231	25-30	178	BBMW-311	14-19	ND
OU2MW-025	20-25	33	OU2MW-232	45-50	ND	BBMW-32D	30-35	ND
OU2MW-031	35-40	146	OU2MW-241	25-30	5,796	BBMW-321	14-19	ND
OU2MW-035	20-25	80	OU2MW-242	45-50	ND	MW-021R	22-52.5	ND
OU2MW-041	35-40	98	OU2MW-251	25-30	121	MW-03D	35-45	ND
OU2MW-045	20-25	641	OU2MW-252	45-50	ND	MW-091	30-40	ND
OU2MW-05	25-35	353	OU2MW-261	13-23	277	MW-161	14-19	ND
OU2MW-06	15-25	ND	OU2MW-262	35-45	2,576	MW-26D	14-19	ND
OU2MW-071	35-40	98	OU2MW-281	25-30	121	MW-29D	14-19	ND
OU2MW-081	35-40	4,781	OU2MW-282	40-45	15	MW-34D	27-52.5	ND
OU2MW-085	20-25	4,426	OU2MW-29D	45-50	314	MW-341	18-19.5	ND
OU2MW-09	20-30	11	OU2MW-291	18-23	700	MW-54	19-24	ND
OU2MW-101	20-25	29	OU2MW-292	45-50	2,778	MW-65	11-15	ND
OU2MW-11D	40-45	9	OU2MW-301	25-30	5,175	MW-65D	24-29	ND
OU2MW-111	20-25	1,323	OU2MW-302	30-35	6,025	MW-BS-02D	24-52.5	ND
OU2MW-112	30-35	1,011	OU2MW-303	45-50	5,562	MW-BS-021	14-51.5	ND
OU2MW-12D	40-45	2	OU2MW-311	18-23	79	OU-4		
OU2MW-121	20-25	513	OU2MW-312	30-35	ND	WCMW-011	35-45	ND
OU2MW-122	30-35	720	OU2MW-32D	40-45	189	WCMW-021	34.5-44.5	142
OU2MW-13D	35-40	21	OU2MW-321	20-25	2,818	WCMW-032	28.55-33.55	ND
			OU2MW-322	30-35	1,164	WCMW-041	19-24.4	33
			OU2MW-331	20-25	565	WCMW-042	29.85-34.85	ND
			OU2MW-332	30-35	104	WCMW-051	19.1-24.61	17D
			OU2MW-341	35-40	257	WCMW-052	29.45-34.46	ND
			OU2MW-342	45-50	3	WCMW-061	19.55-24.55	ND
			OU2MW-351	25-30	250	WCMW-062	29.83-34.83	ND
			OU2MW-352	45-50	ND	WCMW-063	15-20	ND
			OU2MW-361	25-30	573	WCMW-10D	40-50	ND
			OU2MW-362	45-50	ND	WCMW-121	25-30	ND
			OU2MW-371	25-30	38	WCMW-131	25-30	ND
			OU2MW-372	45-50	ND	WCMW-141	20-25	2
			OU2MW-381	25-30	2,302	WCMW-142	30-35	ND
			OU2MW-382	46-51	ND	WCMW-161	20-25	ND
			OU2MW-391	25-30	4	WCMW-162	30-35	ND
			OU2MW-392	45-50	ND	WCMW-171	20-25	292
			OU2MW-401	18-23	167	WCMW-172	30-35	ND

Q3 2021



Q3 2021 Groundwater Monitoring Data			Q3 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2			OU-1 and OU-2		
BBMW-201	35-45	62.73	OU2MW-5712	35-45	ND
BBMW-221	30-40	3454.8	OU2MW-161	20-30	ND
BBMW-341	25-30	1016	OU2MW-162	35-45	ND
BBMW-342	40-45	1637	OU2MW-171	20-30	ND
BBMW-381	25-30	551	OU2MW-172	35-45	ND
BBMW-411	35-45	2738	OU2MW-181	20-30	ND
MW-05D	25-30	43	OU2MW-182	35-45	7.1
MW-06D	35.5-45.5	1319.8	OU2MW-191	20-30	313.65
OU2MW-025	20-25	ND	OU2MW-192	35-45	65.1
OU2MW-041	35-40	ND	OU2MW-211	20-30	162.2
OU2MW-06	15-25	ND	OU2MW-212	35-45	4734.5
OU2MW-111	20-25	ND	OU2MW-231	20-30	ND
OU2MW-112	30-35	ND	OU2MW-232	35-45	ND
OU2MW-11D	40-45	ND	OU2MW-241	20-30	ND
OU2MW-121	20-25	ND	OU2MW-242	35-45	4120
OU2MW-1212	30-35	ND	OU2MW-251	20-30	2441
OU2MW-12D	40-45	ND	OU2MW-252	35-45	183
OU2MW-191	13-23	ND	OU2MW-262	35-45	ND
OU2MW-192	35-45	ND	OU-3		
OU2MW-271	25-30	ND	IP-16A	14-15	ND
OU2MW-272	45-50	ND	IP-20A	14-15	ND
OU2MW-281	25-33	ND	IP-20B	24-25	130.3
OU2MW-282	40-45	ND	MW-54	19-24	11.9
OU2MW-291	18-23	ND	OU3MW-071	15-20	ND
OU2MW-292	30-35	ND	OU3MW-072	20-25	ND
OU2MW-29D	45-50	ND	OU3MW-073	25-30	ND
OU2MW-301	25-30	ND	OU3MW-074	30-40	ND
OU2MW-302	30-35	ND	OU3MW-091	25-30	3.23
OU2MW-303	45-50	ND	OU3MW-101	25-30	1.8
OU2MW-311	18-23	ND	OU3MW-191	20-25	ND
OU2MW-312	30-35	ND	OU3MW-192	30-35	ND
OU2MW-321	25-30	ND	OU3MW-201	30-35	ND
OU2MW-322	45-50	ND	OU3MW-202	30-35	ND
OU2MW-401	18-23	ND	OU3MW-231P-17B	10-15	0.55
OU2MW-411	18-23	ND	OU3MW-241P-19A	10-15	ND
OU2MW-471	20-25	ND	OU3MW-242P-19B	15-20	ND
OU2MW-472	40-45	ND	OU-4		
OU2MW-501	25-30	ND	WCMW-051	19.81-24.81	184.65
OU2MW-502	45-50	ND	WCMW-052	29.46-34.46	48.9
OU2MW-571	20-30	ND	WCMW-301	20-25	107.8

NOTE:
 * INDICATES WELL NOT SAMPLED IN Q3 2021 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- BBMW-33: EXISTING MONITORING WELL CLUSTER LOCATION
- BBMW-381: WELL NOT SAMPLED IN Q1 2019 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L: MICROGRAMS PER LITER
- WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).
- TOTAL PAH ≥ 100 µg/L
- TOTAL PAH ≥ 1,000 µg/L
- TOTAL PAH ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)
- POLYCYCLIC AROMATIC HYDROCARBONS

Bay Shore/Brightwaters
 Former MGP Site
 Bay Shore, New York

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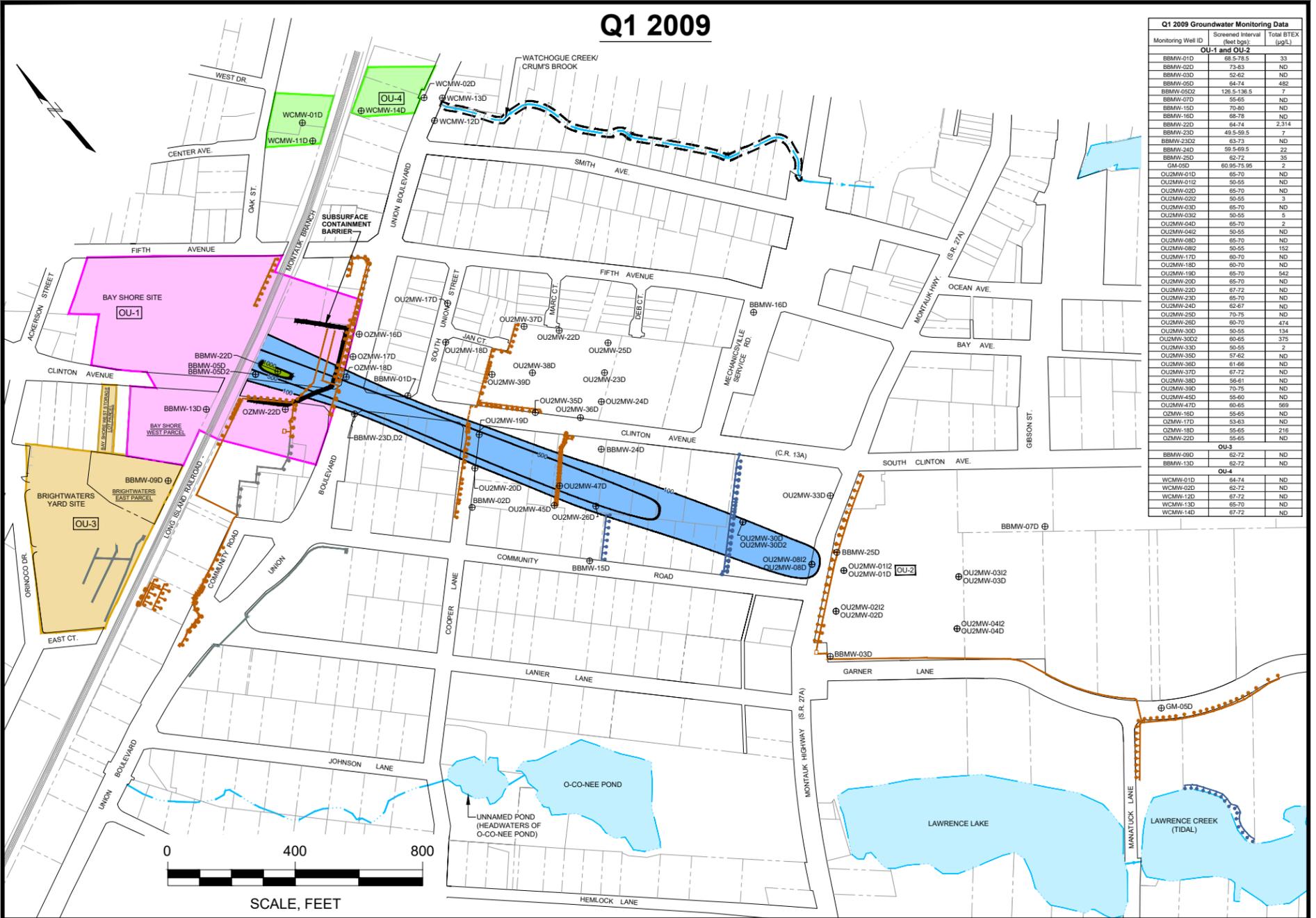
Project 1905774

INTERMEDIATE GROUNDWATER
 TOTAL PAH
 ISO-CONCENTRATION MAPS
 (10-50 FEET BGS)

February 2022

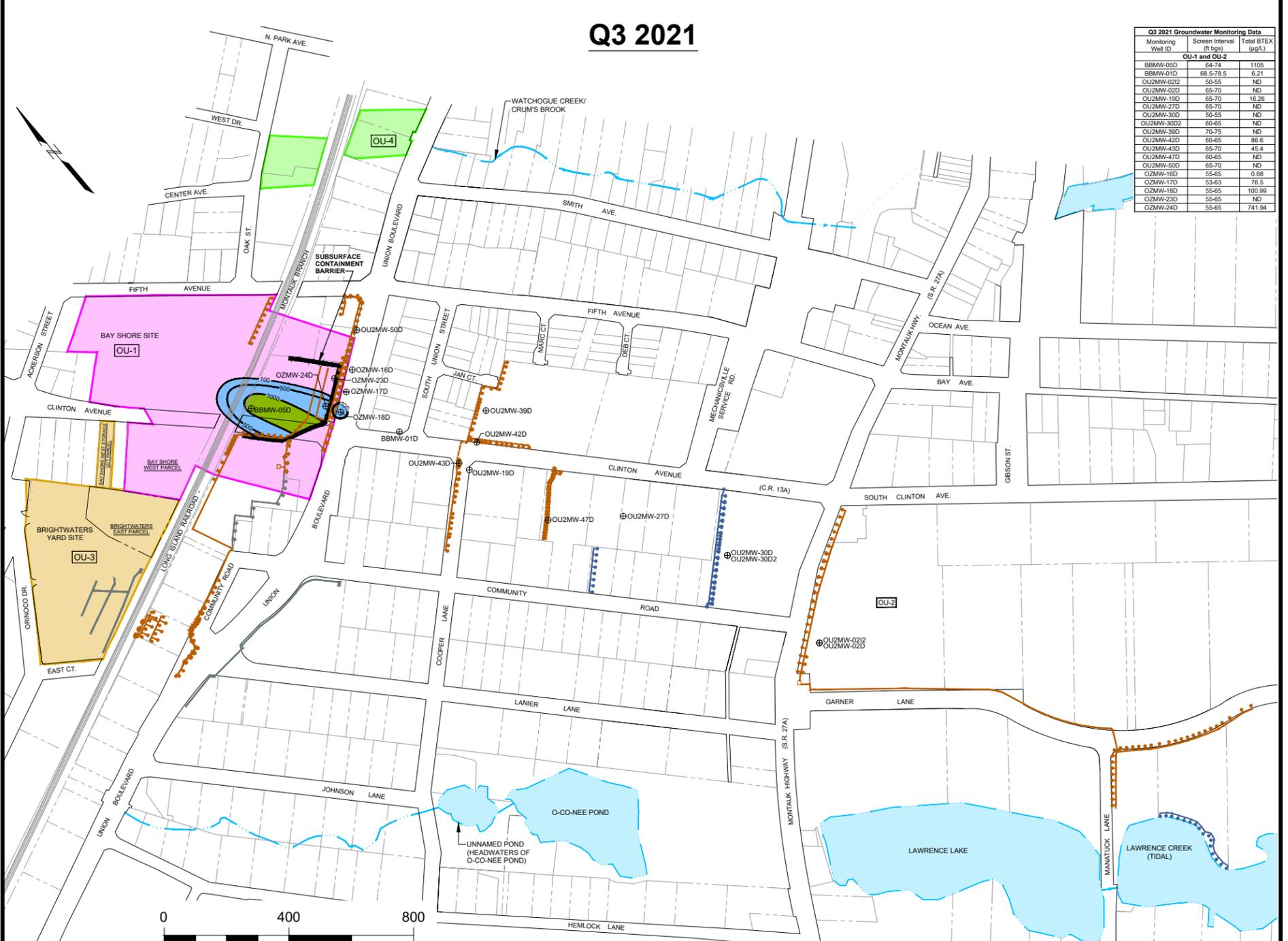
Fig. 6

Q1 2009



Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	33
BBMW-02D	73-83	ND
BBMW-03D	52-62	ND
BBMW-05D	64-74	482
BBMW-05D2	126.5-136.5	7
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-16D	68-78	ND
BBMW-22D	64-74	2,314
BBMW-23D	49.5-59.5	7
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	22
BBMW-25D	62-72	35
GM-05D	60.95-70.95	2
OZ2MW-01D	65-70	ND
OZ2MW-01D2	50-55	ND
OZ2MW-02D	65-70	ND
OZ2MW-02D2	50-55	ND
OZ2MW-03D	65-70	ND
OZ2MW-03D2	50-55	5
OZ2MW-04D	65-70	2
OZ2MW-04D2	50-55	ND
OZ2MW-09D	65-70	ND
OZ2MW-08D2	50-55	152
OZ2MW-17D	60-70	ND
OZ2MW-18D	60-70	ND
OZ2MW-19D	60-70	ND
OZ2MW-20D	65-70	542
OZ2MW-20D2	50-55	2
OZ2MW-35D	57-62	ND
OZ2MW-36D	60-70	474
OZ2MW-38D	60-70	ND
OZ2MW-39D	65-70	375
OZ2MW-39D2	50-55	2
OZ2MW-45D	57-62	ND
OZ2MW-45D2	50-55	ND
OZ2MW-47D	60-70	ND
OZ2MW-48D	61-66	ND
OZ2MW-49D	55-65	ND
OZ2MW-17D	53-63	ND
OZ2MW-18D	55-65	ND
OZ2MW-22D	55-65	ND
OU-3		
BBMW-09D	62-72	ND
BBMW-13D	62-72	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-72	ND
WCMW-14D	65-70	ND
WCMW-14D	67-72	ND

Q3 2021



Q3 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-05D	64-74	1105
BBMW-01D	68.5-78.5	6.21
OZ2MW-02D	50-55	ND
OZ2MW-02D2	65-70	ND
OZ2MW-19D	65-70	16.26
OZ2MW-27D	65-70	ND
OZ2MW-30D	50-55	ND
OZ2MW-30D2	60-65	ND
OZ2MW-39D	70-75	ND
OZ2MW-42D	60-65	86.8
OZ2MW-43D	65-70	45.4
OZ2MW-47D	60-65	ND
OZ2MW-50D	65-70	ND
OZMW-16D	55-65	0.68
OZMW-17D	53-63	78.5
OZMW-18D	55-65	100.99
OZMW-23D	55-65	ND
OZMW-24D	55-65	741.94

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L MICROGRAMS PER LITER
- BTEX BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- BTEX ≥ 100 µg/L
- BTEX ≥ 1,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

Bay Shore/Brightwaters
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Bay Shore, New York

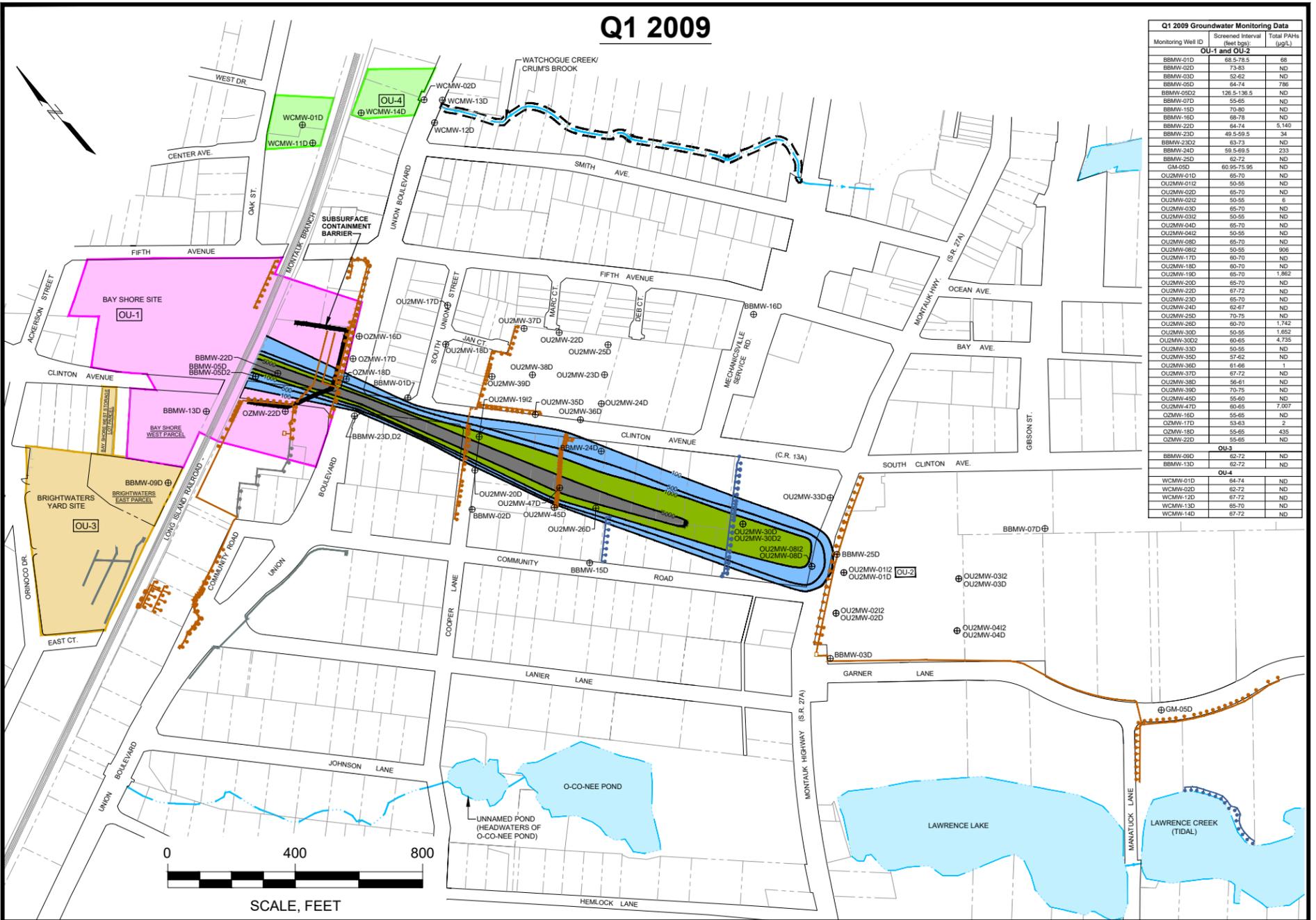
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**DEEP GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(BELOW 50 FEET BGS)**

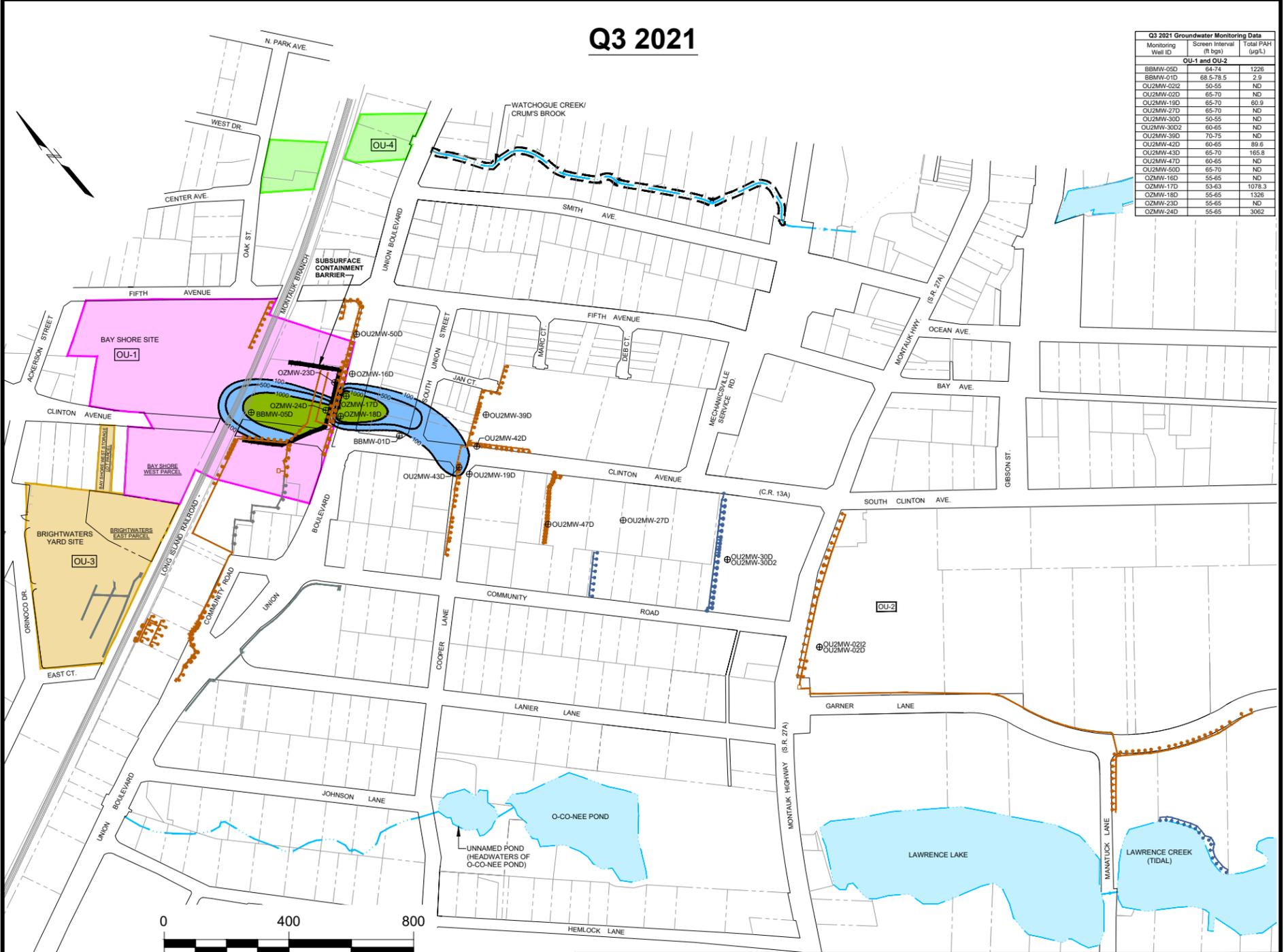
Project 1905774 February 2022 Fig. 7

Q1 2009



Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	68
BBMW-02D	73-83	ND
BBMW-03D	52-63	ND
BBMW-05D	64-74	786
BBMW-05D2	126.5-136.5	ND
BBMW-07D	55-65	ND
BBMW-15D	70-80	6
BBMW-16D	68-78	ND
BBMW-22D	64-74	5,140
BBMW-23D	49.5-59.5	34
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	233
BBMW-25D	62-72	ND
GM-05D	60.95-70.95	ND
OU2MW-01D	65-70	ND
OU2MW-01D2	50-55	ND
OU2MW-02D	65-70	ND
OU2MW-02D2	50-55	ND
OU2MW-03D	65-70	ND
OU2MW-03D2	50-55	ND
OU2MW-04D	65-70	ND
OU2MW-04D2	50-55	ND
OU2MW-08D	65-70	ND
OU2MW-08D2	50-55	906
OU2MW-17D	60-70	ND
OU2MW-18D	60-70	ND
OU2MW-19D	65-70	1,862
OU2MW-20D	65-70	ND
OU2MW-22D	67-72	ND
OU2MW-23D	65-70	1,742
OU2MW-24D	62-67	ND
OU2MW-25D	70-75	ND
OU2MW-26D	60-70	1,652
OU2MW-30D	50-55	1
OU2MW-30D2	60-65	4,735
OU2MW-33D	50-55	ND
OU2MW-35D	57-62	ND
OU2MW-36D	61-66	1
OU2MW-37D	67-72	ND
OU2MW-38D	56-61	ND
OU2MW-39D	70-75	ND
OU2MW-45D	50-55	ND
OU2MW-47D	60-65	7,007
OZMW-18D	55-65	ND
OZMW-17D	53-63	ND
OZMW-18D	52-62	435
OZMW-22D	55-65	ND
OU-3		
BBMW-09D	62-72	ND
BBMW-13D	69-79	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-77	ND
WCMW-14D	65-70	ND
WCMW-14D	67-72	ND

Q3 2021



Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2		
BBMW-05D	64-74	1226
BBMW-01D	68.5-78.5	2.9
OU2MW-02D	50-55	ND
OU2MW-02D	65-70	ND
OU2MW-19D	65-70	60.9
OU2MW-27D	65-70	ND
OU2MW-30D	50-55	ND
OU2MW-30D2	60-65	ND
OU2MW-39D	70-75	ND
OU2MW-43D	60-65	89.8
OU2MW-43D	65-70	165.8
OU2MW-47D	60-65	ND
OU2MW-50D	65-70	ND
OZMW-16D	55-65	ND
OZMW-17D	53-63	1079.3
OZMW-18D	55-65	1326
OZMW-23D	55-65	ND
OZMW-24D	55-65	3062

SCALE, FEET

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L MICROGRAMS PER LITER
- TOTAL PAH ≥ 100 µg/L
- TOTAL PAH ≥ 1,000 µg/L
- TOTAL PAH ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)
- POLYCYCLIC AROMATIC HYDROCARBONS

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York



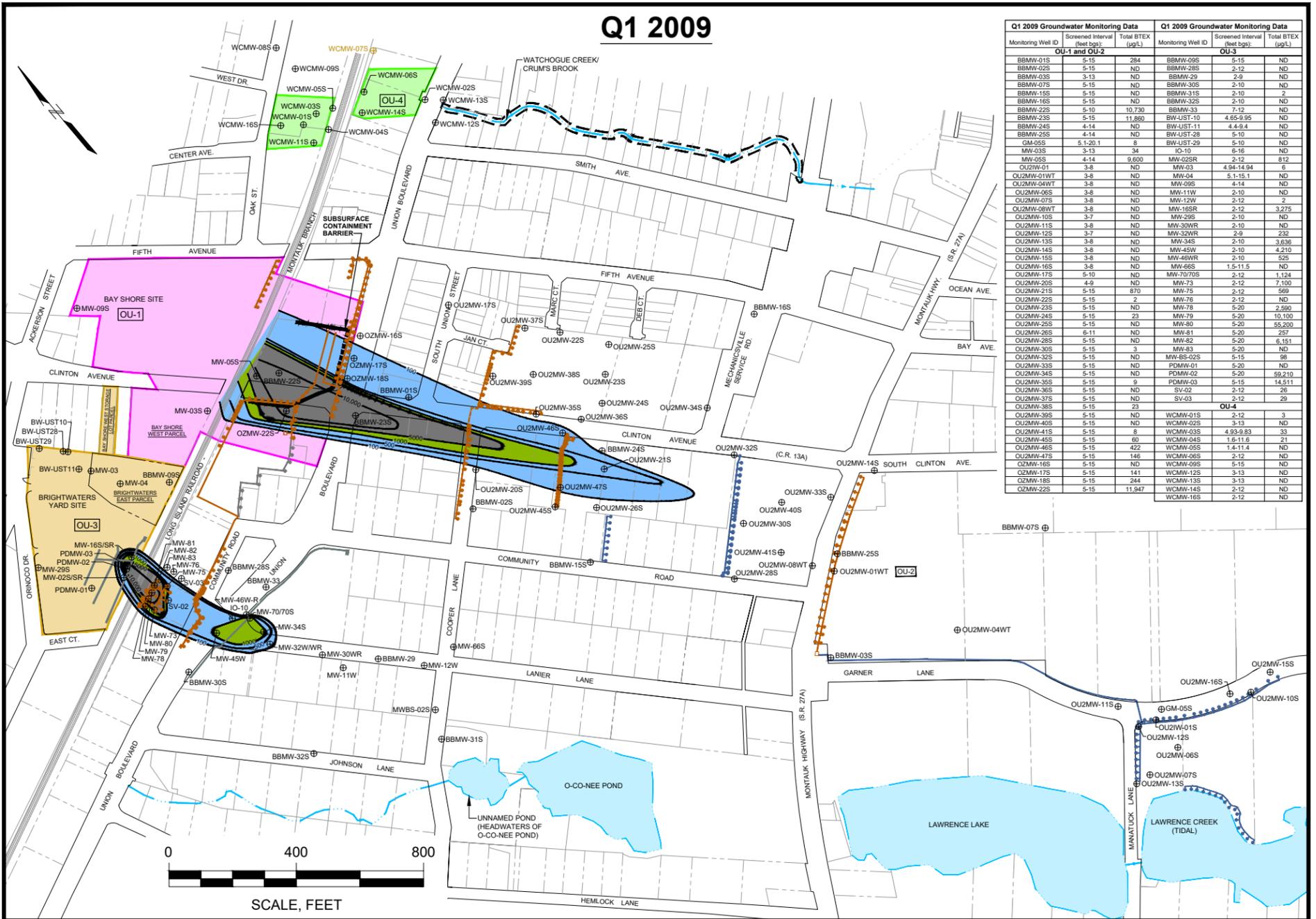
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DEEP GROUNDWATER
TOTAL PAH
ISO-CONCENTRATION MAPS
(BELOW 50 FEET BGS)

February 2022

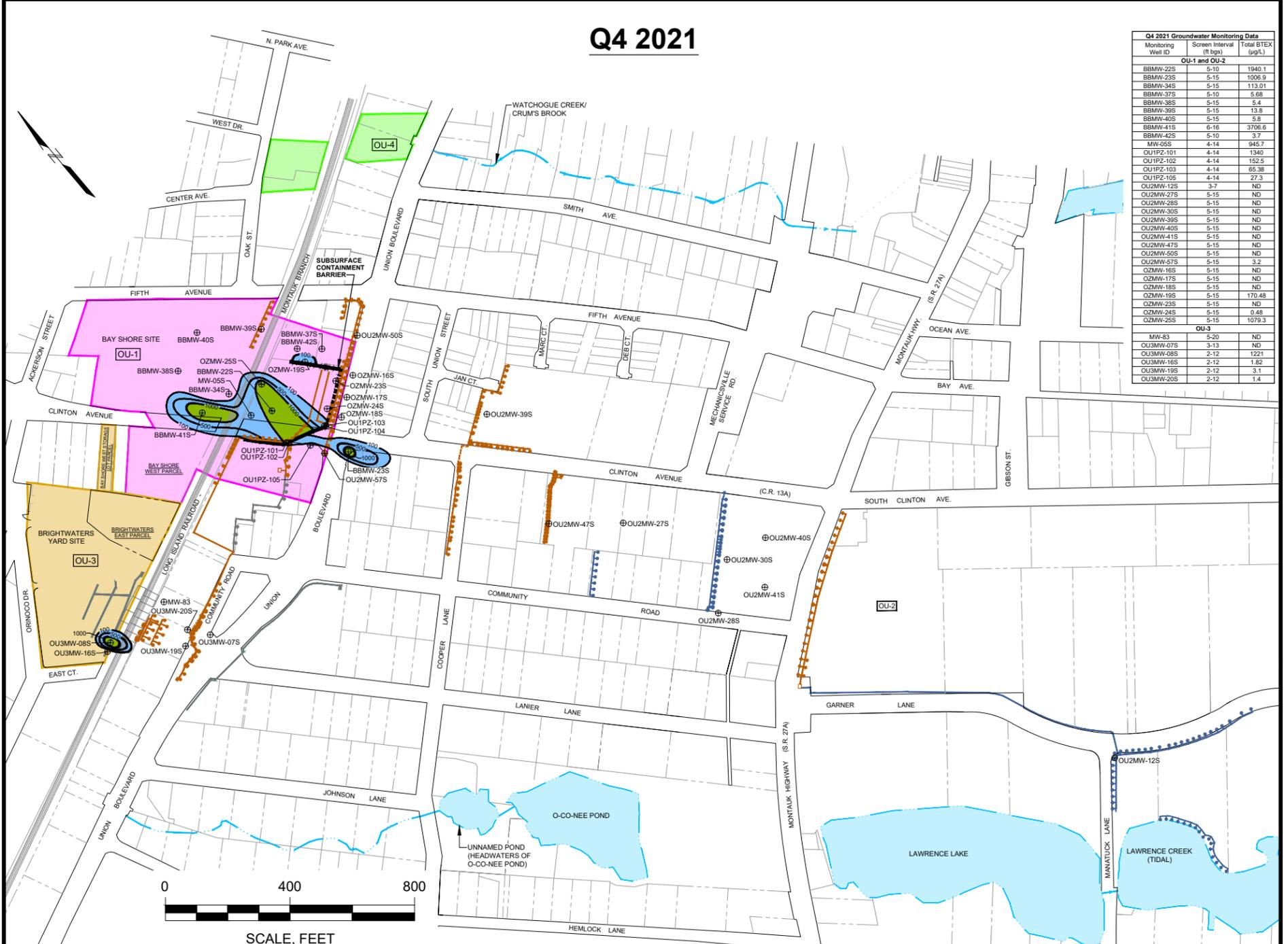
Fig. 8

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2					
BBMW-01S	5-15	284	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-16S	5-15	ND	BBMW-31S	2-10	2
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	10,730	BBMW-33	2-12	2
BBMW-23S	5-15	11,860	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
GM-05S	5.1-20.1	8	BW-UST-29	5-10	ND
MW-03S	3-13	34	O-10	6-16	ND
MW-05S	4-14	9,600	MW-02SR	2-12	812
OZ2MW-01T	3-8	ND	MW-03	4.94-14.94	6
OZ2MW-01WT	3-8	ND	MW-04	5.1-15.1	ND
OZ2MW-04WT	3-8	ND	MW-09S	4-14	ND
OZ2MW-06S	3-8	ND	MW-11W	2-10	ND
OZ2MW-07S	3-8	ND	MW-12W	2-12	2
OZ2MW-08WT	3-8	ND	MW-16SR	2-12	3,275
OZ2MW-10S	3-7	ND	MW-29S	2-10	ND
OZ2MW-11S	3-8	ND	MW-30WR	2-10	ND
OZ2MW-12S	3-7	ND	MW-32WR	2-9	232
OZ2MW-13S	3-8	ND	MW-33	5-15	3,038
OZ2MW-20S	4-9	ND	MW-34S	2-12	1,124
OZ2MW-21S	5-15	870	MW-73	2-12	7,100
OZ2MW-22S	5-15	2	MW-75	2-12	569
OZ2MW-23S	5-15	ND	MW-78	2-12	ND
OZ2MW-24S	5-15	23	MW-79	5-20	2,590
OZ2MW-25S	5-15	ND	MW-80	5-20	55,200
OZ2MW-26S	6-11	ND	MW-81	5-20	10,100
OZ2MW-28S	5-15	ND	MW-82	5-20	6,151
OZ2MW-30S	5-15	3	MW-83	5-20	ND
OZ2MW-32S	5-15	ND	MW-8S-02S	5-15	98
OZ2MW-33S	5-15	ND	PDMW-01	5-20	ND
OZ2MW-34S	5-15	ND	PDMW-02	5-20	59,210
OZ2MW-35S	5-15	9	PDMW-03	5-15	14,511
OZ2MW-36S	5-15	ND	SV-02	2-12	26
OZ2MW-37S	5-15	ND	SV-03	2-12	29
OZ2MW-38S	5-15	23	OU-4		
OZ2MW-39S	5-15	ND	WCMW-01S	2-12	3
OZ2MW-40S	5-15	ND	WCMW-02S	2-13	ND
OZ2MW-41S	5-15	8	WCMW-03S	4.92-9.83	33
OZ2MW-45S	5-15	60	WCMW-04S	1.6-11.6	21
OZ2MW-46S	5-15	422	WCMW-05S	1.4-11.4	ND
OZ2MW-47S	5-15	146	WCMW-06S	2-12	ND
OZ2MW-16S	5-15	515	WCMW-07S	5-15	ND
OZ2MW-17S	5-15	141	WCMW-12S	3-13	ND
OZ2MW-18S	5-15	244	WCMW-13S	3-13	ND
OZ2MW-22S	5-15	11,947	WCMW-14S	2-12	ND
			WCMW-16S	2-12	ND

Q4 2021



Q4 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	1840.1
BBMW-23S	5-15	1006.9
BBMW-34S	5-15	113.01
BBMW-37S	5-10	5.68
BBMW-38S	5-15	5.4
BBMW-39S	5-15	13.8
BBMW-40S	5-15	5.8
BBMW-41S	6-16	3706.0
BBMW-42S	5-10	3.7
MW-05S	4-14	945.7
OUPZ-101	4-14	1340
OUPZ-102	4-14	162.5
OUPZ-103	4-14	65.38
OUPZ-105	4-14	27.3
OZ2MW-12S	3-7	ND
OZ2MW-27S	5-15	ND
OZ2MW-28S	5-15	ND
OZ2MW-30S	5-15	ND
OZ2MW-39S	5-15	ND
OZ2MW-40S	5-15	ND
OZ2MW-41S	5-15	ND
OZ2MW-47S	5-15	ND
OZ2MW-50S	5-15	ND
OZ2MW-57S	5-15	3.2
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	ND
OZMW-19S	5-15	170.48
OZMW-23S	5-15	ND
OZMW-24S	5-15	0.48
OZMW-25S	5-15	1079.3
OU-3		
MW-83	5-20	ND
OUMW-07S	3-13	ND
OUMW-08S	2-12	1221
OUMW-16S	2-12	1.62
OUMW-19S	2-12	3.1
OUMW-20S	2-12	1.4

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L MICROGRAMS PER LITER
- BTEX BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- Blue shaded area: BTEX ≥ 100 µg/L
- Green shaded area: BTEX ≥ 1,000 µg/L
- Orange dashed line: OXYGEN INJECTION LINE - INSTALLED
- Blue dashed line: OXYGEN INJECTION LINE - SHUT OFF
- Grey dashed line: OXYGEN INJECTION LINE - ABANDONED
- Black dashed line: ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

nationalgrid

GEI Consultants

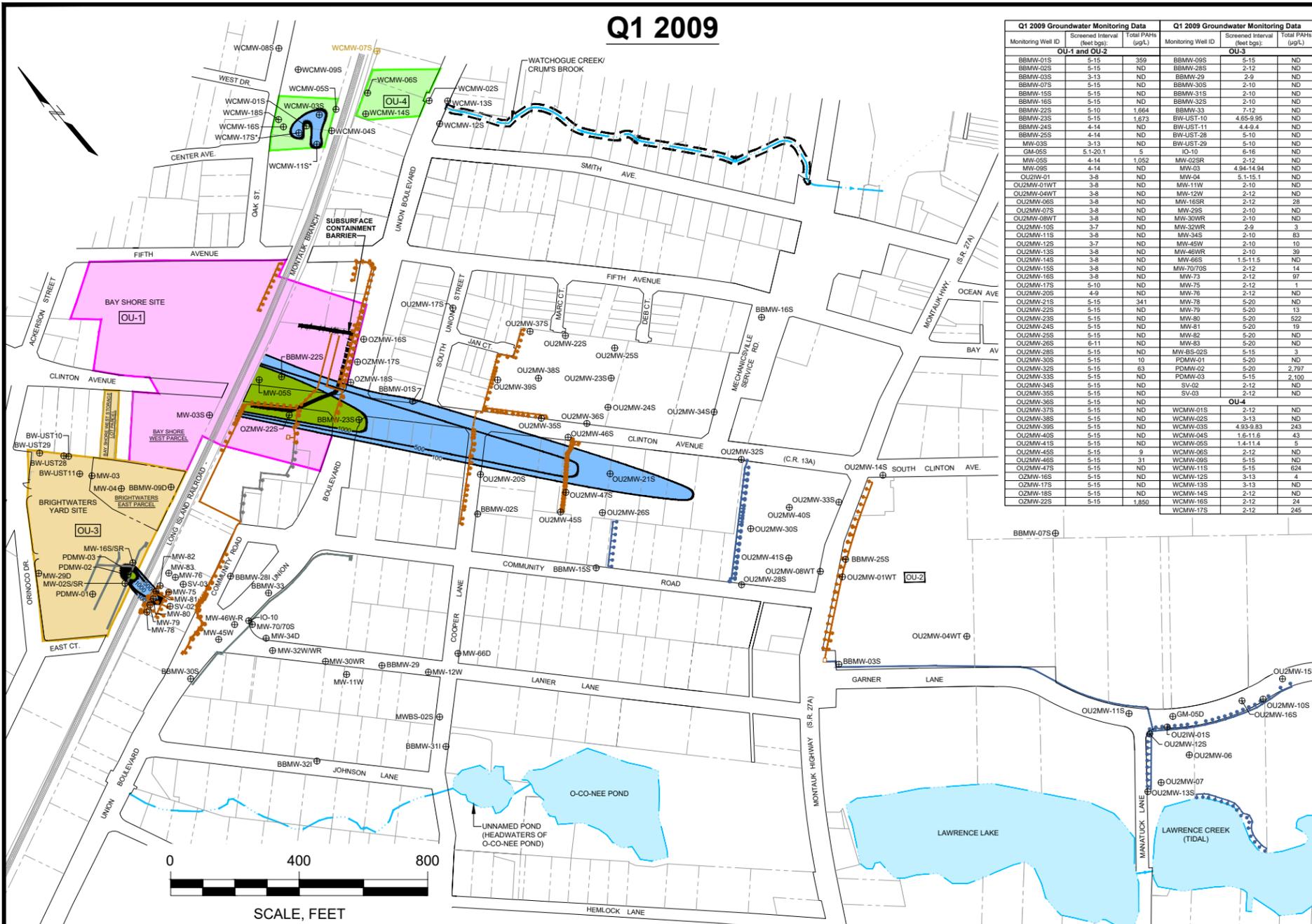
Project 1905774

WATER TABLE GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(0-10 FEET BGS)

June 2022

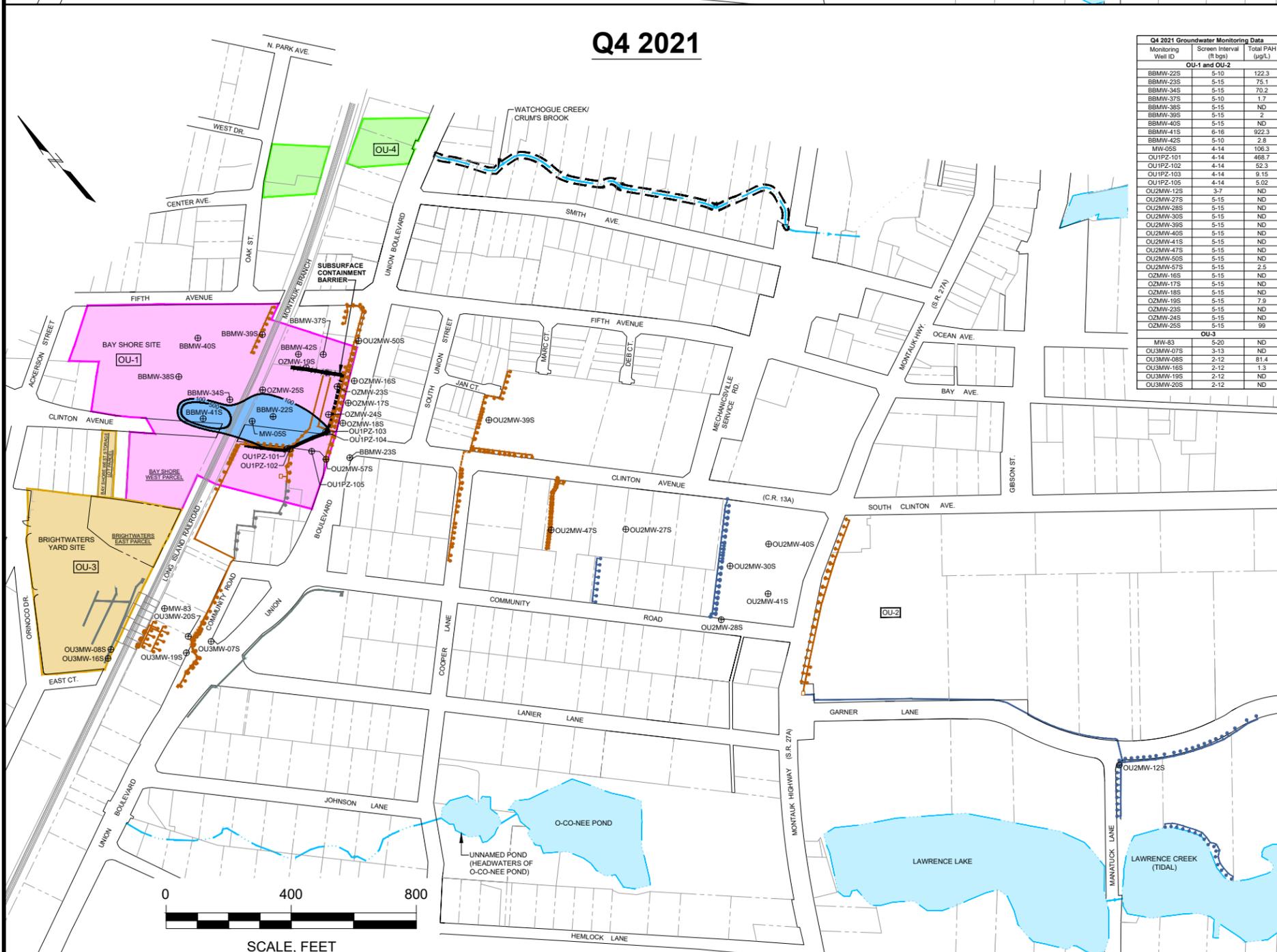
Fig. 3

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2					
BBMW-01S	5-15	359	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-15S	5-15	ND	BBMW-31S	2-10	ND
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	1,664	BBMW-33	7-12	ND
BBMW-23S	5-15	1,673	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
MW-03S	3-13	ND	BW-UST-29	5-10	ND
GM-05S	5.1-20.1	5	IO-10	6-16	ND
MW-05S	4-14	1,052	MW-02SR	2-12	ND
MW-06S	4-14	ND	MW-03	4.94-14.94	ND
OZ2MW-01	3-8	ND	MW-04	5-15	ND
OZ2MW-01WT	3-8	ND	MW-11W	2-10	ND
OZ2MW-02S	3-8	ND	MW-12W	2-12	ND
OZ2MW-03S	3-8	ND	MW-15SR	2-12	28
OZ2MW-04S	3-8	ND	MW-22S	2-10	ND
OZ2MW-05WT	3-8	ND	MW-30WR	2-10	ND
OZ2MW-06S	3-7	ND	MW-32WR	2-9	3
OZ2MW-07S	3-8	ND	MW-34S	2-10	83
OZ2MW-08WT	3-8	ND	MW-35S	2-10	ND
OZ2MW-09S	3-8	ND	MW-45W	2-10	10
OZ2MW-10S	3-8	ND	MW-46WR	2-10	39
OZ2MW-11S	3-8	ND	MW-46S	1.5-11.5	ND
OZ2MW-12S	3-7	ND	MW-70/70S	2-12	14
OZ2MW-13S	3-8	ND	MW-73S	2-12	97
OZ2MW-14S	3-8	ND	MW-75	2-12	1
OZ2MW-15S	3-8	ND	MW-76	2-12	ND
OZ2MW-16S	3-8	ND	MW-78	5-20	ND
OZ2MW-17S	5-10	ND	MW-79	5-20	13
OZ2MW-20S	4-9	ND	MW-80	5-20	522
OZ2MW-21S	5-15	341	MW-81	5-20	19
OZ2MW-22S	5-15	ND	MW-82	5-20	ND
OZ2MW-23S	5-15	ND	MW-83	5-20	ND
OZ2MW-24S	5-15	ND	MW-85-02S	5-15	3
OZ2MW-25S	5-15	ND	PDMW-01	5-20	ND
OZ2MW-26S	5-15	ND	PDMW-02	5-20	2,797
OZ2MW-27S	5-15	ND	PDMW-03	5-15	2,100
OZ2MW-28S	5-15	ND	SV-02	2-12	ND
OZ2MW-29S	5-15	ND	SV-03	2-12	ND
OZ2MW-30S	5-15	ND	OU-4		
OZ2MW-31S	5-15	ND	WCMW-01S	2-12	ND
OZ2MW-32S	5-15	ND	WCMW-02S	3-13	ND
OZ2MW-33S	5-15	ND	WCMW-03S	4.93-9.93	243
OZ2MW-34S	5-15	ND	WCMW-04S	1.5-11.5	43
OZ2MW-35S	5-15	ND	WCMW-05S	1.4-11.4	5
OZ2MW-36S	5-15	ND	WCMW-06S	2-12	ND
OZ2MW-37S	5-15	ND	WCMW-07S	5-15	2
OZ2MW-38S	5-15	ND	WCMW-12S	3-13	4
OZ2MW-39S	5-15	ND	WCMW-13S	3-13	ND
OZ2MW-40S	5-15	ND	WCMW-14S	2-12	824
OZ2MW-41S	5-15	ND	WCMW-16S	2-12	24
OZ2MW-42S	5-15	ND	WCMW-17S	2-12	245

Q4 2021



Q4 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	122.3
BBMW-23S	5-15	75.1
BBMW-34S	5-15	70.2
BBMW-37S	5-10	1.7
BBMW-38S	5-15	ND
BBMW-40S	5-15	2
BBMW-41S	6-16	922.3
BBMW-42S	5-10	2.8
MW-25S	2-14	106.3
OUIPZ-101	4-14	468.7
OUIPZ-102	4-14	52.3
OUIPZ-103	4-14	9.15
OUIPZ-105	4-14	5.02
OZ2MW-12S	3-7	ND
OZ2MW-27S	5-15	ND
OZ2MW-28S	5-15	ND
OZ2MW-30S	5-15	ND
OZ2MW-39S	5-15	ND
OZ2MW-40S	5-15	ND
OZ2MW-41S	5-15	ND
OZ2MW-47S	5-15	ND
OZ2MW-50S	5-15	ND
OZ2MW-57S	5-15	2.5
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	ND
OZMW-19S	5-15	7.9
OZMW-23S	5-15	ND
OZMW-24S	5-15	ND
OZMW-25S	5-15	99
OU-3		
MW-83	5-20	ND
OZ3MW-07S	3-13	ND
OZ3MW-08S	2-12	81.4
OZ3MW-16S	3-12	1.3
OZ3MW-19S	2-12	ND
OZ3MW-20S	2-12	ND

LEGEND:

- ⊕ BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L MICROGRAMS PER LITER
- PAH POLYCYCLIC AROMATIC HYDROCARBONS
- TOTAL PAH ≥ 100 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

NOTE:
WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

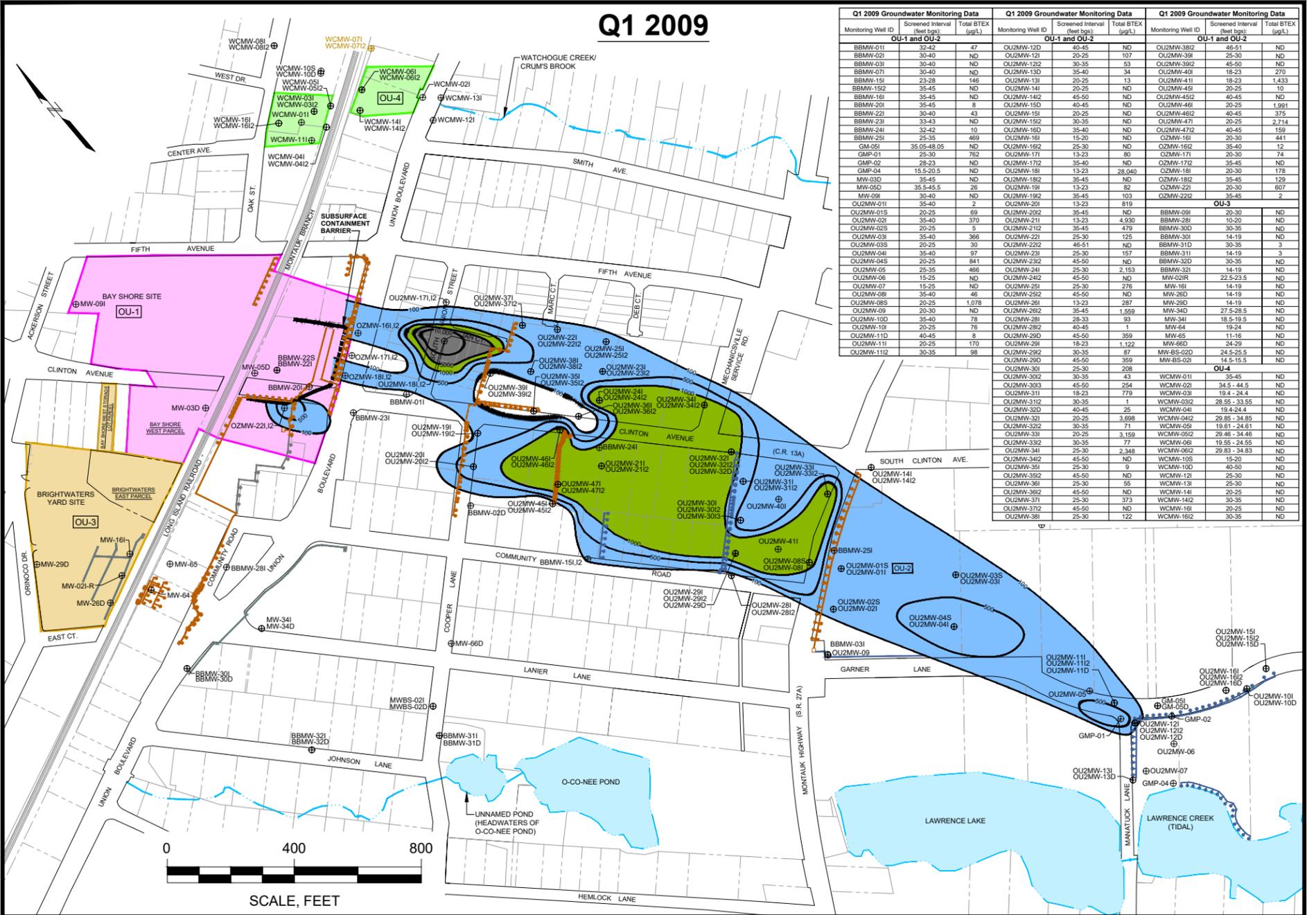
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Project 1905774
June 2022

**WATER TABLE GROUNDWATER
TOTAL PAH
ISO-CONCENTRATION MAPS
(0-10 FEET BGS)**

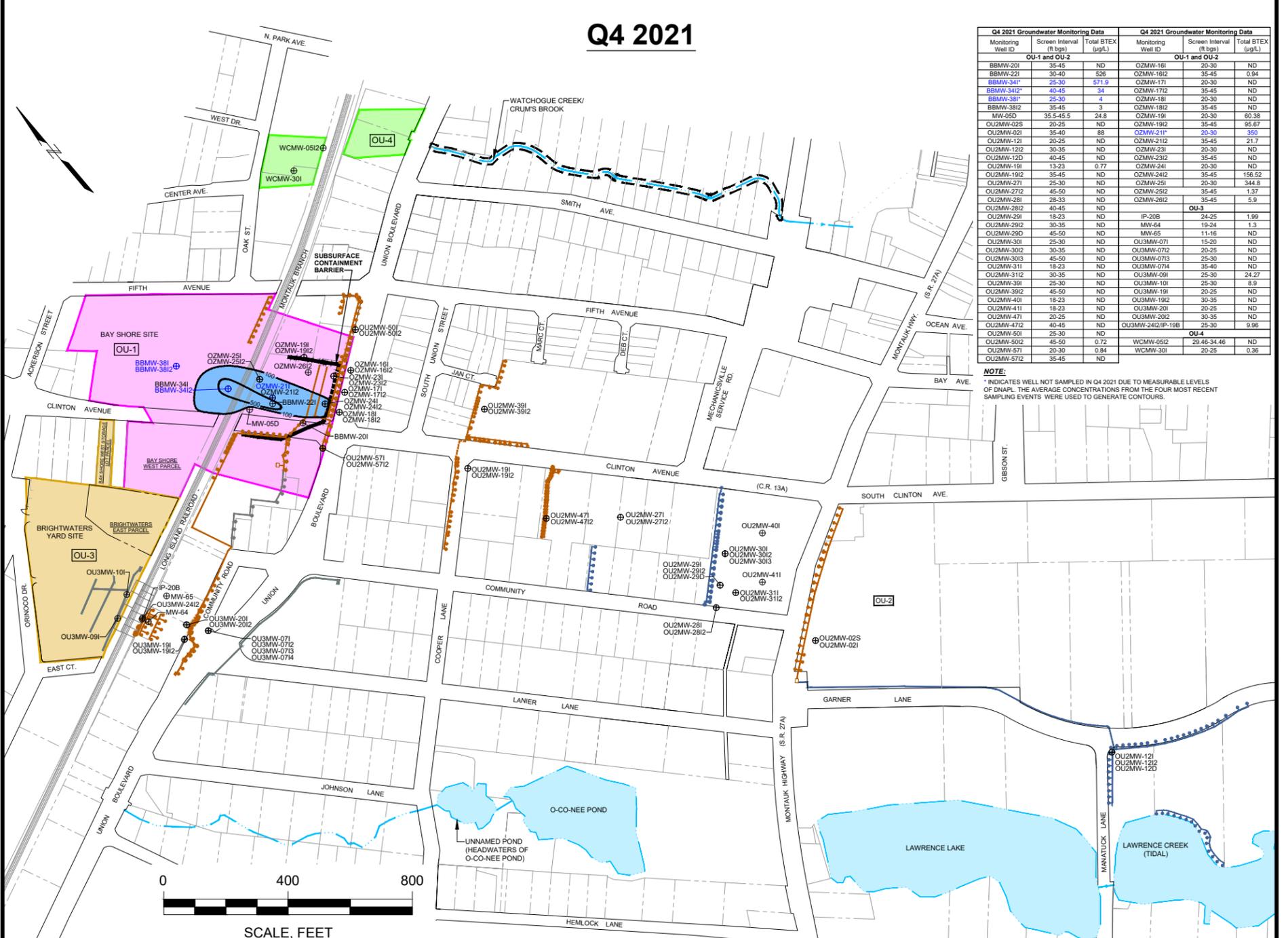
Fig. 4

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2			OU-1 and OU-2		
BBMW-011	32-42	47	OU2MW-12D	40-45	ND	OU2MW-38I	46-51	ND
BBMW-021	30-40	ND	OU2MW-121	20-25	107	OU2MW-39I	25-30	ND
BBMW-031	30-40	ND	OU2MW-122	30-35	ND	OU2MW-39II	45-50	ND
BBMW-071	30-40	ND	OU2MW-130	35-40	34	OU2MW-40I	15-23	270
BBMW-151	23-28	146	OU2MW-131	20-25	13	OU2MW-41I	18-23	1,433
BBMW-152	35-45	ND	OU2MW-141	20-25	ND	OU2MW-45I	20-25	10
BBMW-161	35-45	ND	OU2MW-142	45-50	ND	OU2MW-45II	40-45	ND
BBMW-201	35-45	8	OU2MW-150	40-45	ND	OU2MW-46I	20-25	1,991
BBMW-221	30-40	43	OU2MW-151	20-25	ND	OU2MW-46II	40-45	3,754
BBMW-231	33-43	ND	OU2MW-152	30-35	ND	OU2MW-47I	20-25	271
BBMW-241	32-42	10	OU2MW-160	35-40	ND	OU2MW-47II	40-45	159
BBMW-251	25-35	469	OU2MW-161	15-20	ND	OU2MW-16I	20-30	441
GM-05I	35.05-48.05	ND	OU2MW-162	25-30	ND	OU2MW-16II	35-40	12
GMP-01	25-30	762	OU2MW-171	13-23	80	OU2MW-17I	20-30	74
GMP-02	28-33	ND	OU2MW-172	35-40	ND	OU2MW-17II	35-45	ND
GMP-04	15.5-20.5	ND	OU2MW-181	13-23	28,040	OU2MW-18I	20-30	178
MW-03D	35-45	ND	OU2MW-182	35-45	ND	OU2MW-18II	35-45	129
MW-05D	35.5-45.5	26	OU2MW-191	13-23	82	OU2MW-22I	20-30	607
MW-09	30-40	ND	OU2MW-192	35-45	103	OU2MW-22II	35-45	2
OU2MW-011	35-40	2	OU2MW-201	13-23	819	OU-3		
OU2MW-018	20-25	69	OU2MW-202	35-45	ND	BBMW-09I	20-30	ND
OU2MW-021	35-40	370	OU2MW-211	13-23	4,930	BBMW-28I	10-20	ND
OU2MW-025	20-25	5	OU2MW-212	35-45	479	BBMW-30D	30-35	ND
OU2MW-031	35-40	366	OU2MW-221	25-30	125	BBMW-30I	14-19	ND
OU2MW-035	20-25	30	OU2MW-232	46-51	ND	BBMW-31D	30-35	3
OU2MW-041	35-40	97	OU2MW-231	25-30	157	BBMW-31I	14-19	3
OU2MW-045	20-25	841	OU2MW-232	45-50	ND	BBMW-32D	30-35	ND
OU2MW-051	25-35	466	OU2MW-241	25-30	2,153	BBMW-32I	14-19	ND
OU2MW-061	15-25	ND	OU2MW-242	45-50	ND	MW-02IR	22.5-23.5	ND
OU2MW-071	15-25	ND	OU2MW-251	25-30	276	MW-19I	14-19	ND
OU2MW-081	35-40	46	OU2MW-252	45-50	ND	MW-26D	14-19	ND
OU2MW-085	20-25	1,078	OU2MW-261	13-23	287	MW-29D	14-19	ND
OU2MW-091	20-30	ND	OU2MW-262	35-45	1,569	MW-34D	27.5-28.5	ND
OU2MW-10D	35-40	78	OU2MW-281	28-33	93	MW-34I	18.5-19.5	ND
OU2MW-10I	20-25	76	OU2MW-282	40-45	1	MW-64	19-24	ND
OU2MW-11D	40-45	8	OU2MW-29D	45-50	359	MW-65	11-16	ND
OU2MW-11I	20-25	170	OU2MW-29I	18-23	1,122	MW-66D	24-29	ND
OU2MW-112	30-35	98	OU2MW-292	30-35	87	MW-65-02D	24.5-25.5	ND
			OU2MW-29D	45-50	359	MW-65-02I	14.5-15.5	ND
			OU2MW-301	25-30	208	OU-4		
			OU2MW-302	30-35	43	WCMW-011	35-45	ND
			OU2MW-303	45-50	254	WCMW-021	34.5 - 44.5	ND
			OU2MW-311	18-23	779	WCMW-03I	19.4 - 24.4	ND
			OU2MW-312	30-35	1	WCMW-03II	28.55 - 33.55	ND
			OU2MW-32D	40-45	25	WCMW-04I	19 - 24.4	ND
			OU2MW-321	30-35	3,698	WCMW-05I	29.85 - 34.85	ND
			OU2MW-322	30-35	71	WCMW-05II	19.61 - 24.61	ND
			OU2MW-331	20-25	3,159	WCMW-06I	29.46 - 34.46	ND
			OU2MW-332	30-35	2,77	WCMW-06II	19.55 - 24.55	ND
			OU2MW-341	25-30	2,348	WCMW-07I	29.83 - 34.83	ND
			OU2MW-342	45-50	ND	WCMW-10S	15-20	ND
			OU2MW-351	25-30	9	WCMW-10D	40-50	ND
			OU2MW-352	45-50	ND	WCMW-12I	25-30	ND
			OU2MW-361	25-30	59	WCMW-13I	25-30	ND
			OU2MW-362	45-50	ND	WCMW-14I	20-25	ND
			OU2MW-371	25-30	373	WCMW-14II	30-35	ND
			OU2MW-372	45-50	ND	WCMW-18I	20-25	ND
			OU2MW-381	25-30	122	WCMW-19I	30-35	ND

Q4 2021



Q4 2021 Groundwater Monitoring Data			Q4 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2		
BBMW-201	35-45	ND	OU2MW-16I	20-30	ND
BBMW-221	30-40	526	OU2MW-16II	35-45	0.94
BBMW-341	25-30	571.9	OU2MW-17I	20-30	ND
BBMW-342	40-45	34	OU2MW-17II	35-45	ND
BBMW-381	25-30	4	OU2MW-18I	20-30	ND
BBMW-382	35-45	3	OU2MW-18II	35-45	ND
MW-05D	35.5-45.5	24.8	OU2MW-19I	20-30	60.38
OU2MW-02S	20-25	ND	OU2MW-19II	35-45	96.67
OU2MW-021	35-40	88	OU2MW-21I	20-30	350
OU2MW-121	20-25	ND	OU2MW-21II	35-45	21.7
OU2MW-122	30-35	ND	OU2MW-23I	20-30	ND
OU2MW-12D	40-45	ND	OU2MW-23II	35-45	ND
OU2MW-19I	13-23	0.77	OU2MW-24I	20-30	ND
OU2MW-192	35-45	ND	OU2MW-24II	35-45	156.52
OU2MW-271	25-30	ND	OU2MW-25I	20-30	344.8
OU2MW-272	45-50	ND	OU2MW-25II	35-45	1.37
OU2MW-281	28-33	ND	OU2MW-26I	35-45	5.9
OU2MW-282	40-45	ND	OU-3		
OU2MW-291	18-23	ND	IP-20B	24-25	1.99
OU2MW-292	30-35	ND	MW-64	19-24	1.3
OU2MW-29D	45-50	ND	MW-65	11-16	ND
OU2MW-30I	25-30	ND	OU3MW-07I	15-20	ND
OU2MW-302	30-35	ND	OU3MW-07II	20-25	ND
OU2MW-303	45-50	ND	OU3MW-073	25-30	ND
OU2MW-311	18-23	ND	OU3MW-074	35-40	ND
OU2MW-312	30-35	ND	OU3MW-09I	25-30	24.27
OU2MW-39I	25-30	ND	OU3MW-10I	25-30	8.9
OU2MW-471	40-45	ND	OU3MW-19I	20-25	ND
OU2MW-40I	18-23	ND	OU3MW-192	30-35	ND
OU2MW-41I	18-23	ND	OU3MW-20I	20-25	ND
OU2MW-47I	20-25	ND	OU3MW-202	30-35	ND
OU2MW-472	25-30	ND	OU3MW-242IIP-19B	15-30	9.96
OU2MW-50I	25-30	ND	OU-4		
OU2MW-502	45-50	0.72	WCMW-05I2	29.46-34.46	ND
OU2MW-57I	20-30	0.84	WCMW-30I	20-25	0.36
OU2MW-572	35-45	ND			

NOTE: * INDICATES WELL NOT SAMPLED IN Q4 2021 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- BBMW-33: EXISTING MONITORING WELL CLUSTER LOCATION
- BBMW-38I: WELL NOT SAMPLED IN Q4 2021 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L: MICROGRAMS PER LITER
- BTEX ≥ 100 µg/L: BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters Former MGP Site Bay Shore, New York

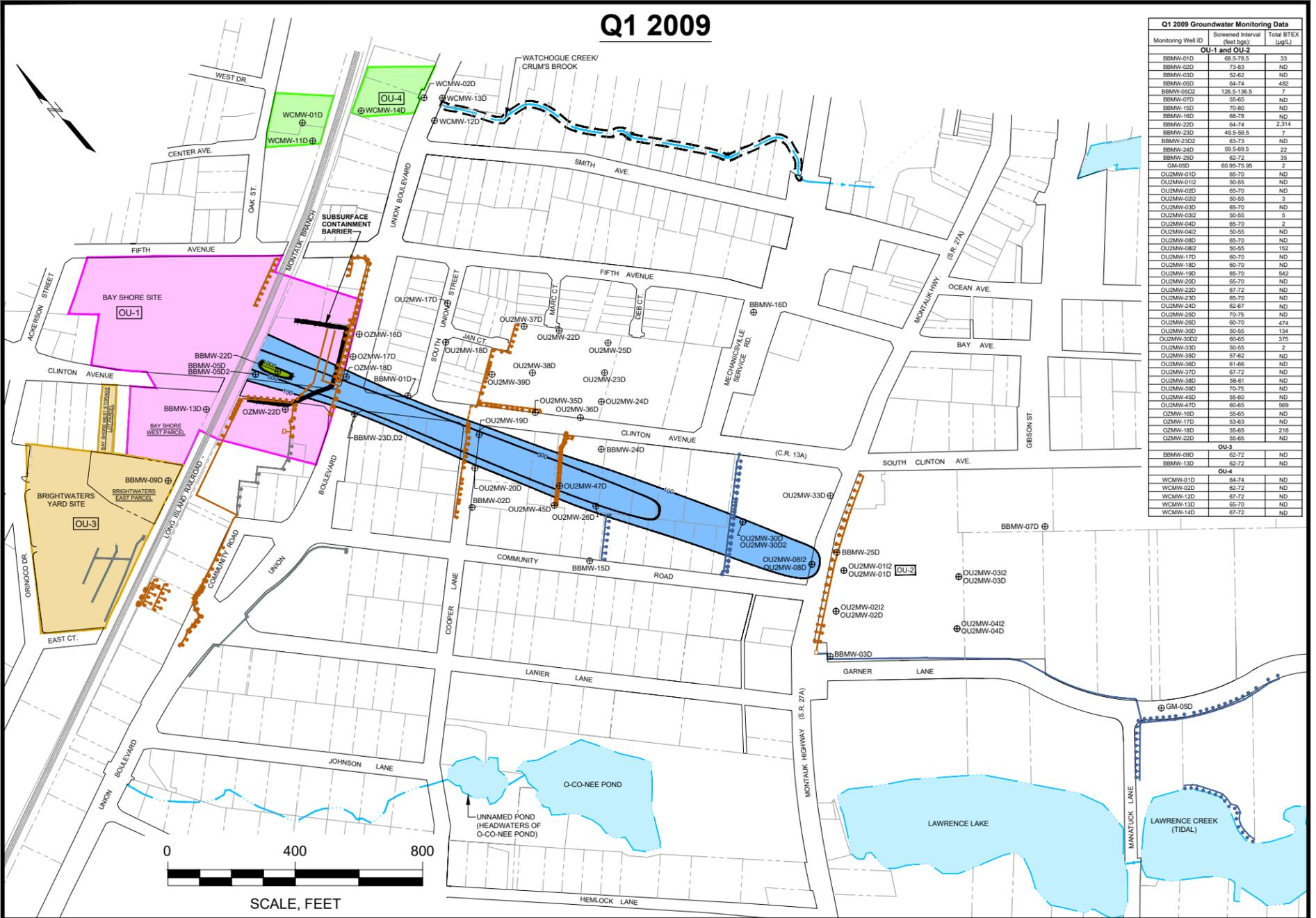
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Project 1905774 June 2022 Fig. 5

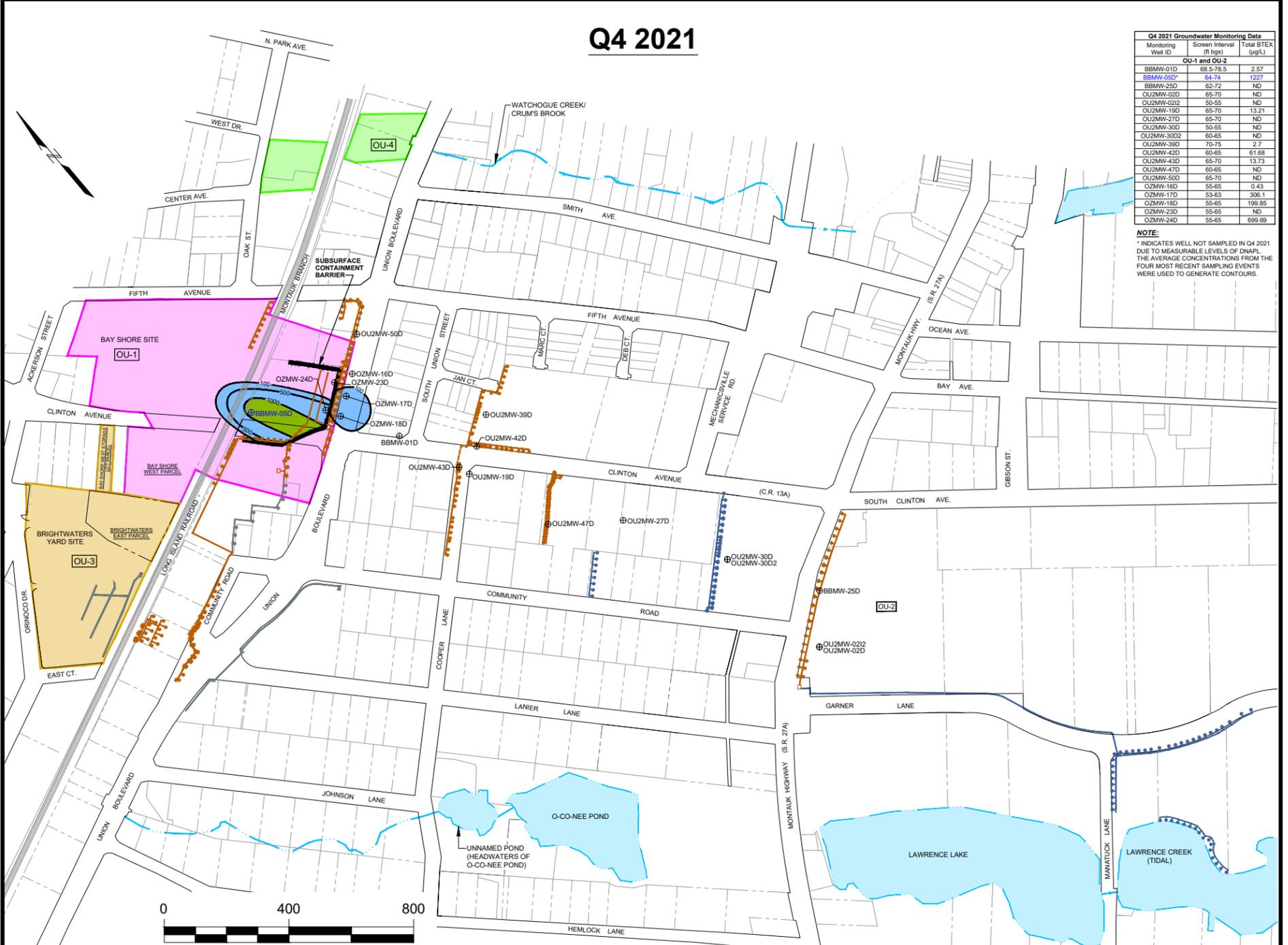
INTERMEDIATE GROUNDWATER TOTAL BTEX ISO-CONCENTRATION MAPS (10-50 FEET BGS)

Q1 2009



Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	33
BBMW-02D	73-83	ND
BBMW-03D	52-62	ND
BBMW-05D	64-74	482
BBMW-05D2	126.5-136.5	7
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-16D	68-78	ND
BBMW-22D	64-74	2,314
BBMW-23D	49.5-59.5	7
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	22
BBMW-25D	62-72	35
GM-05D	60.95-75.95	2
OZ2MW-01D	65-75	ND
OZ2MW-01D2	50-55	ND
OZ2MW-02D	65-75	ND
OZ2MW-02D2	50-55	ND
OZ2MW-03D	65-75	ND
OZ2MW-03D2	50-55	5
OZ2MW-04D	65-75	2
OZ2MW-04D2	50-55	ND
OZ2MW-09D	65-75	ND
OZ2MW-08D2	50-55	152
OZ2MW-17D	60-70	ND
OZ2MW-18D	60-70	ND
OZ2MW-19D	65-75	ND
OZ2MW-20D	65-75	142
OZ2MW-22D	67-77	ND
OZ2MW-23D	65-75	ND
OZ2MW-24D	65-75	ND
OZ2MW-25D	70-75	ND
OZ2MW-26D	60-70	474
OZ2MW-30D	60-65	134
OZ2MW-30D2	60-65	375
OZ2MW-31D	50-55	2
OZ2MW-35D	57-67	ND
OZ2MW-36D	61-66	ND
OZ2MW-36D2	67-77	ND
OZ2MW-37D	67-77	ND
OZ2MW-38D	56-61	ND
OZ2MW-39D	70-75	ND
OZ2MW-43D	65-75	ND
OZ2MW-44D	65-75	ND
OZ2MW-47D	60-65	569
OZ2MW-18D	55-65	ND
OZ2MW-17D	53-63	ND
OZ2MW-19D	55-65	ND
OZ2MW-24D	55-65	ND
OU-3		
BBMW-09D	62-72	ND
BBMW-13D	62-72	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-77	ND
WCMW-14D	65-75	ND
WCMW-14D	67-77	ND

Q4 2021



Q4 2021 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	2.57
BBMW-05D*	64-74	1227
BBMW-25D	62-72	ND
OZ2MW-02D	65-75	ND
OZ2MW-02D2	50-55	ND
OZ2MW-19D	65-75	13.21
OZ2MW-27D	65-75	ND
OZ2MW-30D	50-55	ND
OZ2MW-30D2	60-65	ND
OZ2MW-39D	70-75	2.7
OZ2MW-42D	60-65	61.68
OZ2MW-43D	65-75	13.73
OZ2MW-47D	60-65	ND
OZ2MW-50D	65-75	ND
OZ2MW-16D	65-65	0.43
OZ2MW-17D	53-63	306.1
OZ2MW-18D	55-65	199.85
OZ2MW-23D	55-65	ND
OZ2MW-24D	55-65	699.89

NOTE:
 * INDICATES WELLS NOT SAMPLED IN Q4 2021 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

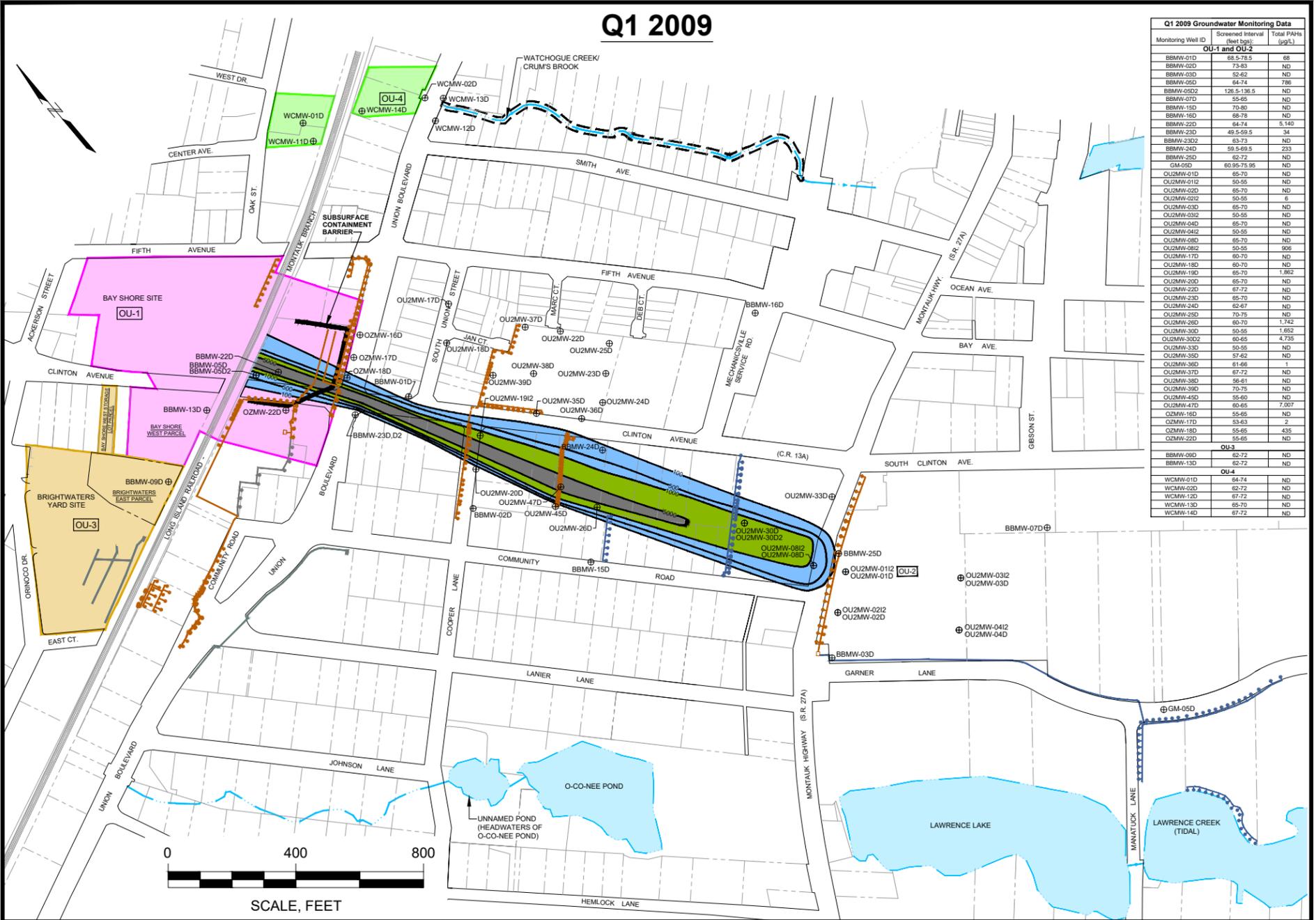
@BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
 @BBMW-05D WELL NOT SAMPLED IN Q4 2021 DUE TO MEASURABLE LEVELS OF DNAPL
 µg/L MICROGRAMS PER LITER
LEGEND:
 BTEX ≥ 100 µg/L
 BTEX ≥ 1,000 µg/L
 BTEX BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
 OXYGEN INJECTION LINE - INSTALLED
 OXYGEN INJECTION LINE - SHUT OFF
 OXYGEN INJECTION LINE - ABANDONED
 ISO-CONCENTRATION LINE (µg/L)

Bay Shore/Brightwaters
 Former MGP Site
 Bay Shore, New York

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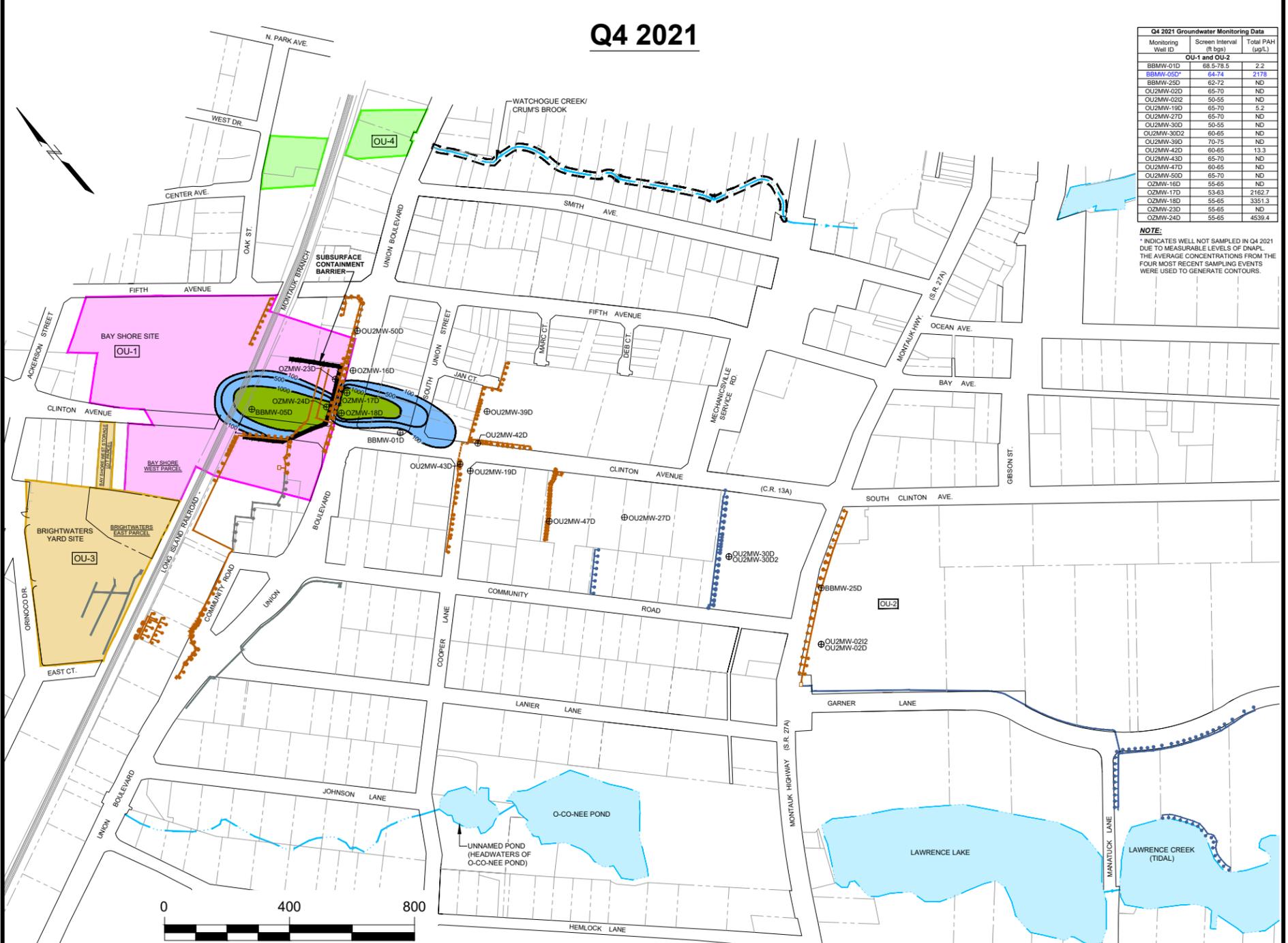
DEEP GROUNDWATER
 TOTAL BTEX
 ISO-CONCENTRATION MAPS
 (BELOW 50 FEET BGS)
 June 2022
 Fig. 7

Q1 2009



Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	68
BBMW-02D	73-83	ND
BBMW-03D	52-63	ND
BBMW-05D	64-74	786
BBMW-05D2	126.5-136.5	ND
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-16D	68-78	ND
BBMW-22D	64-74	5,140
BBMW-23D	49.5-59.5	34
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	233
BBMW-25D	62-72	ND
GM-05D	60.95-75.95	ND
OZ2MW-01D	65-70	ND
OZ2MW-01D2	50-55	ND
OZ2MW-02D	65-70	ND
OZ2MW-02D2	50-55	ND
OZ2MW-03D	65-70	ND
OZ2MW-03D2	50-55	ND
OZ2MW-04D	65-70	ND
OZ2MW-04D2	50-55	ND
OZ2MW-08D	65-70	ND
OZ2MW-08D2	50-55	906
OZ2MW-17D	60-70	ND
OZ2MW-18D	60-70	ND
OZ2MW-19D	65-70	1,862
OZ2MW-20D	65-70	ND
OZ2MW-22D	67-72	ND
OZ2MW-23D	65-70	1,742
OZ2MW-24D	62-67	ND
OZ2MW-25D	70-75	ND
OZ2MW-26D	60-70	1,652
OZ2MW-30D	50-55	1
OZ2MW-30D2	60-65	4,735
OZ2MW-33D	50-55	ND
OZ2MW-35D	57-62	ND
OZ2MW-36D	61-66	ND
OZ2MW-37D	67-72	ND
OZ2MW-38D	56-61	ND
OZ2MW-39D	70-75	ND
OZ2MW-45D	55-65	ND
OZ2MW-47D	60-65	7,007
OZ2MW-18D	55-65	ND
OZ2MW-17D	53-63	2
OZ2MW-18D	53-63	2
OZ2MW-18D	53-63	435
OZ2MW-22D	55-65	ND
OU-3		
BBMW-03D	62-72	ND
BBMW-13D	65-75	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-77	ND
WCMW-13D	65-70	ND
WCMW-14D	67-72	ND

Q4 2021



Monitoring Well ID	Screened Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	2.2
BBMW-05D	64-74	2178
BBMW-25D	62-72	ND
OZ2MW-02D	65-70	ND
OZ2MW-02D2	50-55	ND
OZ2MW-18D	65-70	5.2
OZ2MW-27D	65-70	ND
OZ2MW-30D	50-55	ND
OZ2MW-30D2	60-65	ND
OZ2MW-39D	70-75	ND
OZ2MW-42D	60-65	13.3
OZ2MW-43D	65-70	ND
OZ2MW-47D	60-65	ND
OZ2MW-50D	65-70	ND
OZ2MW-16D	55-65	ND
OZ2MW-17D	53-63	2162.7
OZ2MW-18D	55-65	3351.3
OZ2MW-23D	55-65	ND
OZ2MW-24D	55-65	4539.4

NOTE:
INDICATES WELLS NOT SAMPLED IN Q4 2021 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- ⊕BBMW-05D WELL NOT SAMPLED IN Q4 2021 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- PAH POLYCYCLIC AROMATIC HYDROCARBONS
- TOTAL PAH ≥ 100 µg/L
- TOTAL PAH ≥ 1,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

nationalgrid

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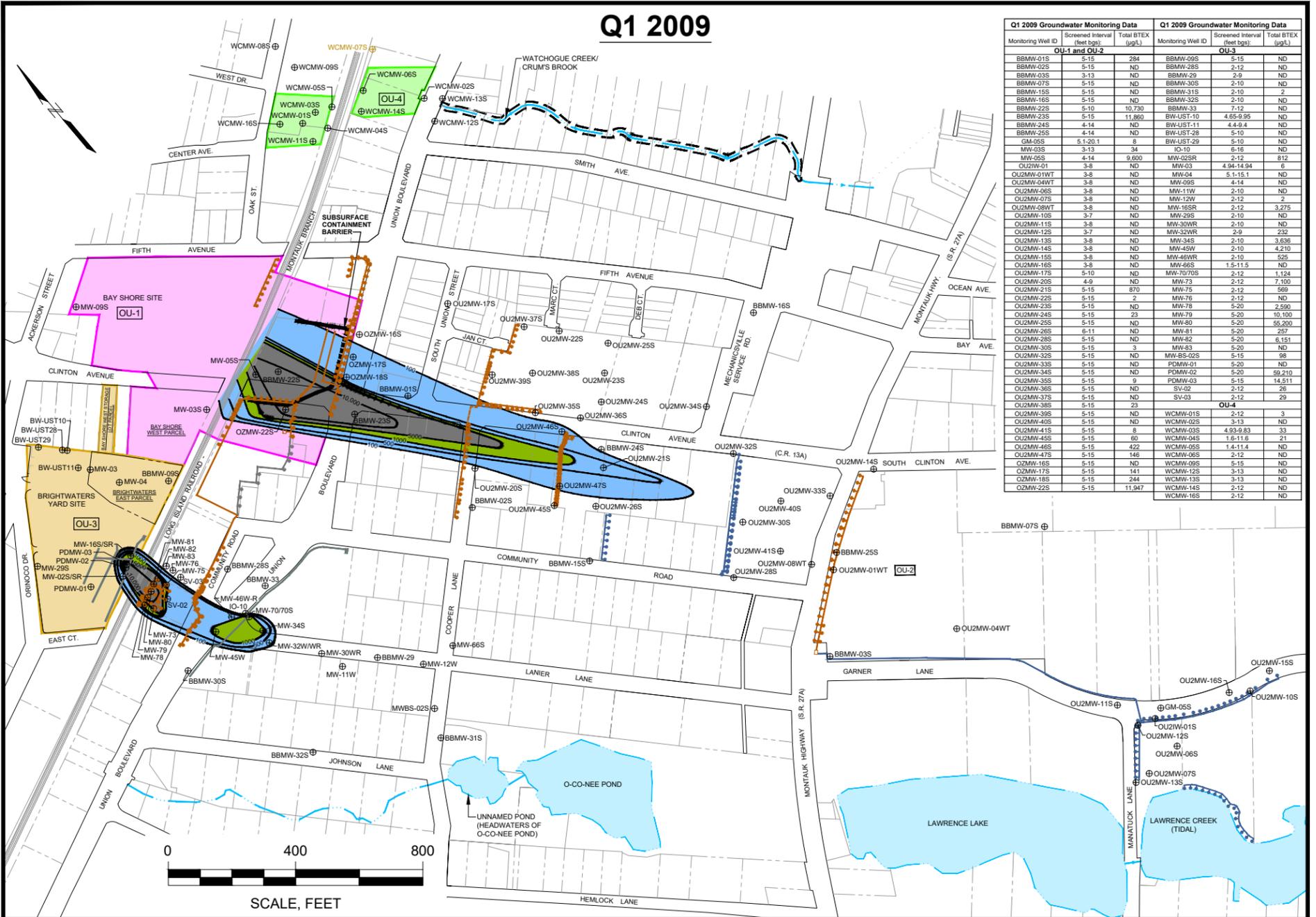
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DEEP GROUNDWATER
TOTAL PAH
ISO-CONCENTRATION MAPS
(BELOW 50 FEET BGS)

June 2022

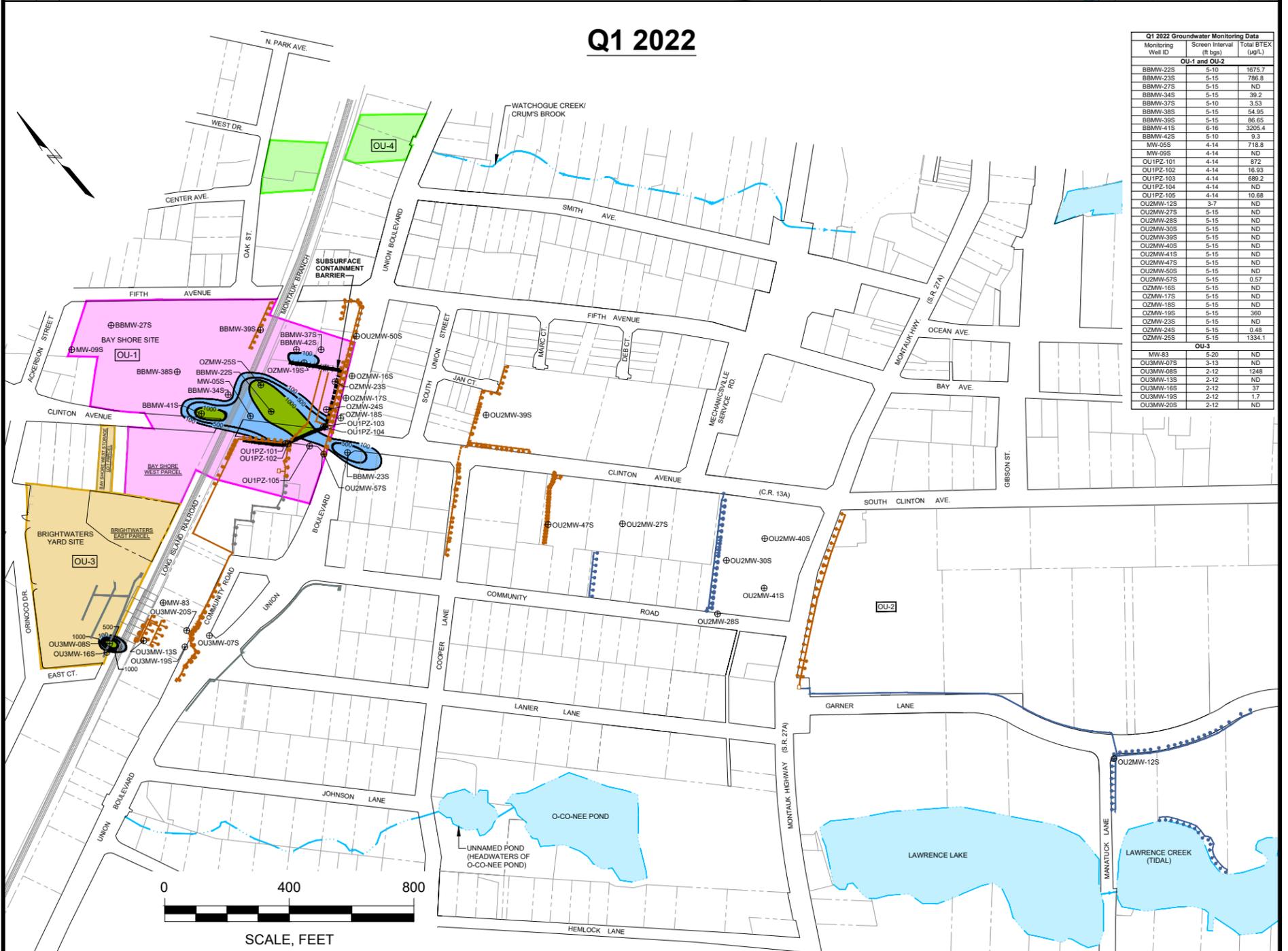
Fig. 8

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2					
BBMW-01S	5-15	284	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-15S	5-15	ND	BBMW-31S	2-10	2
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	10,720	BBMW-33	7-12	ND
BBMW-23S	5-15	11,860	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
GM-05S	5.1-20.1	8	BW-UST-29	5-10	ND
MW-03S	3-13	34	IO-10	6-16	ND
MW-05S	4-14	9,600	MW-02SR	2-12	812
OU2MW-01	3-8	ND	MW-03	4.94-14.94	8
OU2MW-01WT	3-8	ND	MW-04	5.1-15.1	ND
OU2MW-04WT	3-8	ND	MW-05S	4-14	ND
OU2MW-06S	3-8	ND	MW-11W	2-10	ND
OU2MW-07S	3-8	ND	MW-12W	2-12	2
OU2MW-08WT	3-8	ND	MW-15SR	2-12	3,275
OU2MW-10S	3-7	ND	MW-29S	2-10	ND
OU2MW-11S	3-8	ND	MW-30WR	2-10	ND
OU2MW-12S	3-7	ND	MW-32WR	2-9	232
OU2MW-13S	3-8	ND	MW-34S	2-10	3,036
OU2MW-14S	3-8	ND	MW-45W	2-10	4,210
OU2MW-15S	3-8	ND	MW-46WR	2-10	525
OU2MW-16S	3-8	ND	MW-66S	1.5-11.5	ND
OU2MW-17S	5-10	ND	MW-70/70S	2-12	1,124
OU2MW-20S	4-9	ND	MW-73	2-12	7,100
OU2MW-21S	5-15	870	MW-75	2-12	569
OU2MW-22S	5-15	2	MW-76	2-12	ND
OU2MW-23S	5-15	ND	MW-79	5-20	2,590
OU2MW-24S	5-15	23	MW-79	5-20	10,100
OU2MW-25S	5-15	ND	MW-80	5-20	55,200
OU2MW-26S	6-11	ND	MW-81	5-20	297
OU2MW-28S	5-15	ND	MW-82	5-20	5,151
OU2MW-30S	5-15	3	MW-83	5-20	ND
OU2MW-32S	5-15	ND	MW-BS-02S	5-15	98
OU2MW-33S	5-15	ND	PDMM-01	5-20	ND
OU2MW-34S	5-15	ND	PDMM-02	5-20	59,210
OU2MW-35S	5-15	9	PDMM-03	5-15	14,511
OU2MW-36S	5-15	ND	SV-02	2-12	26
OU2MW-37S	5-15	ND	SV-03	2-12	29
OU2MW-38S	5-15	23	OU-4		
OU2MW-39S	5-15	ND	WCMW-01S	2-12	3
OU2MW-40S	5-15	ND	WCMW-02S	3-13	ND
OU2MW-41S	5-15	9	WCMW-03S	4.93-9.93	33
OU2MW-42S	5-15	60	WCMW-04S	1.5-11.6	21
OU2MW-46S	5-15	422	WCMW-05S	1.4-11.4	ND
OU2MW-47S	5-15	146	WCMW-06S	2-12	ND
OZMW-16S	5-15	ND	WCMW-07S	5-15	ND
OZMW-17S	5-15	141	WCMW-12S	3-13	ND
OZMW-18S	5-15	244	WCMW-13S	3-13	ND
OZMW-22S	5-15	11,947	WCMW-14S	2-12	ND
			WCMW-16S	2-12	ND

Q1 2022



Q1 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	1675.7
BBMW-25S	5-15	786.6
BBMW-27S	5-15	ND
BBMW-34S	5-15	39.2
BBMW-37S	5-10	3.53
BBMW-38S	5-15	64.95
BBMW-39S	5-15	86.65
BBMW-41S	6-16	3205.4
BBMW-42S	5-10	9.3
MW-05S	4-14	718.9
MW-09S	4-14	ND
OU1PZ-101	4-14	872
OU1PZ-102	4-14	16.93
OU1PZ-103	4-14	689.2
OU1PZ-104	4-14	ND
OU1PZ-105	4-14	10.68
OU2MW-12S	3-7	ND
OU2MW-27S	5-15	ND
OU2MW-28S	5-15	ND
OU2MW-30S	5-15	ND
OU2MW-39S	5-15	ND
OU2MW-40S	5-15	ND
OU2MW-41S	5-15	ND
OU2MW-47S	5-15	ND
OU2MW-50S	5-15	ND
OU2MW-57S	5-15	0.57
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	ND
OZMW-19S	5-15	360
OZMW-23S	5-15	ND
OZMW-24S	5-15	0.48
OZMW-25S	5-15	1334.1
OU-3		
MW-83	5-20	ND
OU3MW-07S	3-12	1248
OU3MW-08S	2-12	ND
OU3MW-13S	2-12	ND
OU3MW-16S	2-12	37
OU3MW-19S	2-12	1.7
OU3MW-20S	2-12	ND

LEGEND:

- BBMW-33: EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L: MICROGRAMS PER LITER
- BTEX: BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- Blue shaded area: BTEX ≥ 100 µg/L
- Green shaded area: BTEX ≥ 1,000 µg/L
- Orange dashed line: OXYGEN INJECTION LINE - INSTALLED
- Blue dashed line: OXYGEN INJECTION LINE - SHUT OFF
- Grey dashed line: OXYGEN INJECTION LINE - ABANDONED
- Black dashed line: ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

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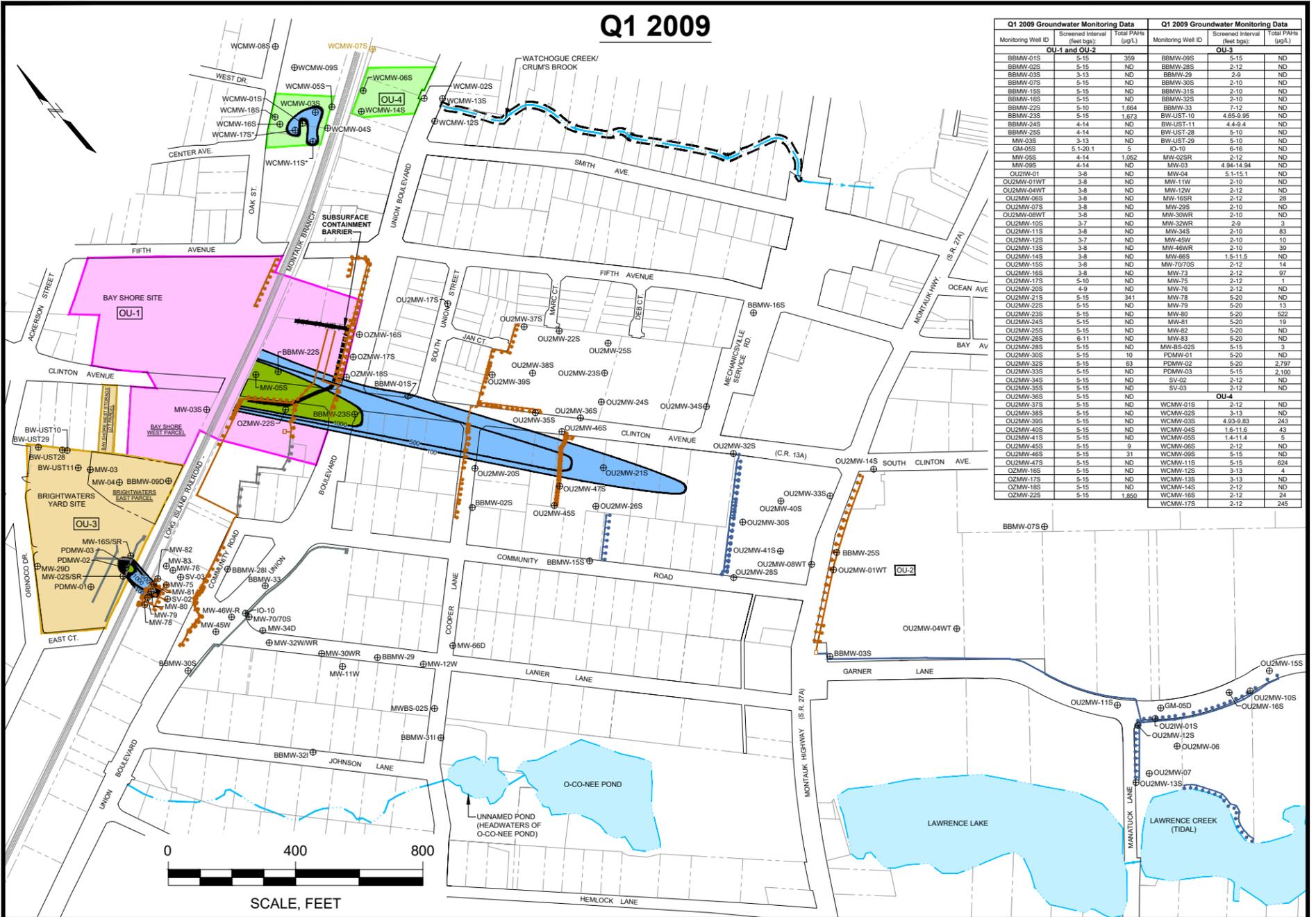
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WATER TABLE GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(0-10 FEET BGS)

August 2022

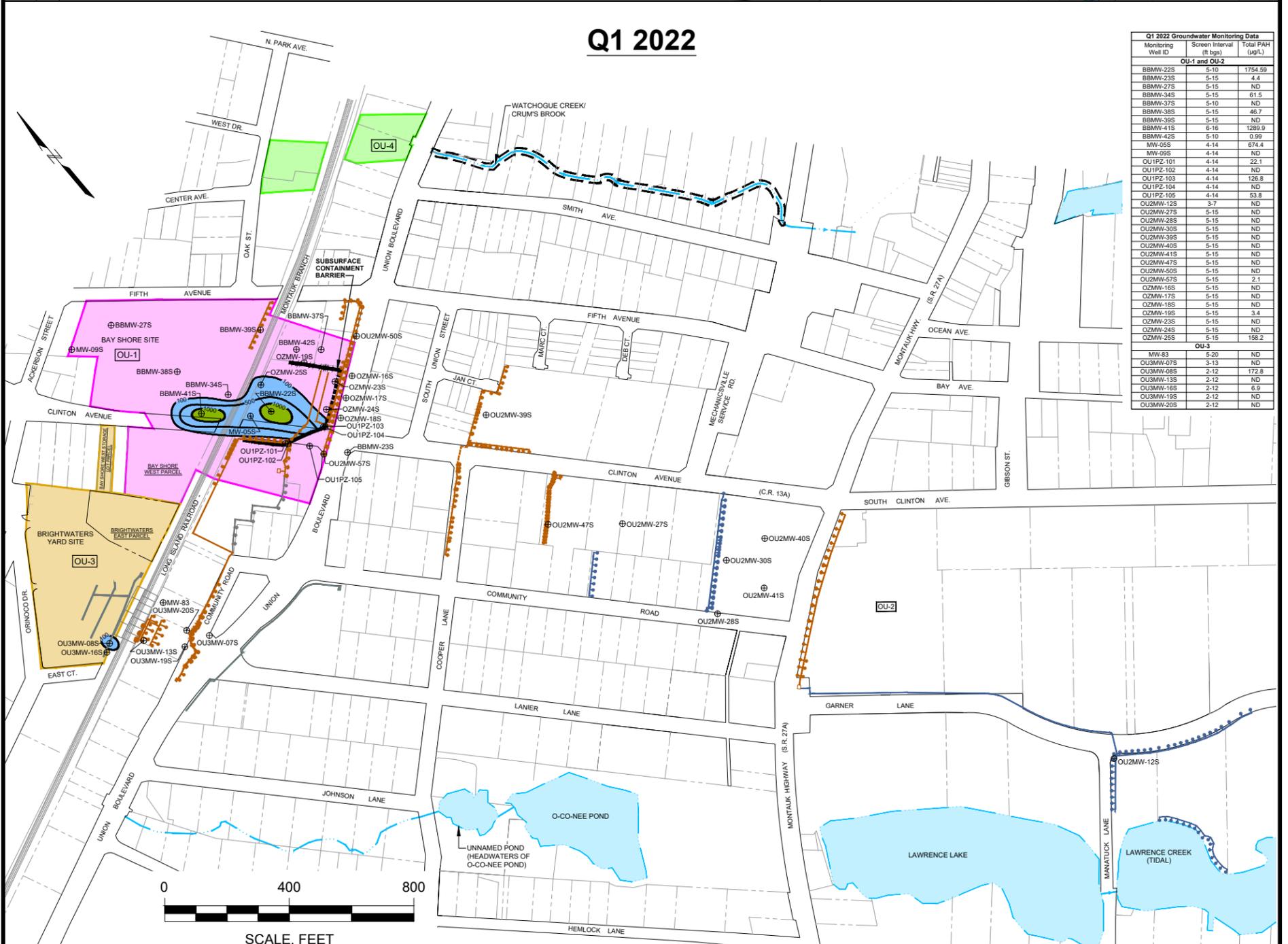
Fig. 3

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2					
BBMW-01S	5-15	350	BBMW-09S	5-15	ND
BBMW-02S	5-15	ND	BBMW-28S	2-12	ND
BBMW-03S	3-13	ND	BBMW-29	2-9	ND
BBMW-07S	5-15	ND	BBMW-30S	2-10	ND
BBMW-16S	5-15	ND	BBMW-31S	2-10	ND
BBMW-16S	5-15	ND	BBMW-32S	2-10	ND
BBMW-22S	5-10	1,564	BBMW-33	7-12	ND
BBMW-23S	5-15	1,673	BW-UST-10	4.65-9.95	ND
BBMW-24S	4-14	ND	BW-UST-11	4.4-9.4	ND
BBMW-25S	4-14	ND	BW-UST-28	5-10	ND
MW-03S	3-13	ND	BW-UST-29	5-10	ND
GM-05S	5.1-20.1	5	IC-10	6-16	ND
MW-05S	4-14	1,052	MW-02SR	2-12	ND
MW-09S	4-14	ND	MW-03	4.94-14.94	ND
OUMW-01	3-8	ND	MW-04	5.1-15.1	ND
OUMW-01WT	3-8	ND	MW-11W	2-10	ND
OUMW-04WT	3-8	ND	MW-12W	2-12	ND
OUMW-08S	3-8	ND	MW-16SR	2-12	28
OUMW-07S	3-8	ND	MW-25S	2-10	ND
OUMW-08WT	3-8	ND	MW-30WR	2-10	ND
OUMW-10S	3-7	ND	MW-32WR	2-9	3
OUMW-11S	3-8	ND	MW-34S	2-10	83
OUMW-07S	3-8	ND	MW-45W	2-10	10
OUMW-13S	3-8	ND	MW-46WR	2-10	39
OUMW-14S	3-8	ND	MW-66S	1.5-11.5	ND
OUMW-15S	3-8	ND	MW-70/70S	2-12	14
OUMW-16S	3-8	ND	MW-73	2-12	97
OUMW-17S	5-10	ND	MW-75	2-12	1
OUMW-20S	4-9	ND	MW-76	2-12	ND
OUMW-21S	5-15	341	MW-78	5-20	ND
OUMW-22S	5-15	ND	MW-82	5-20	ND
OUMW-23S	5-15	ND	MW-80	5-20	19
OUMW-24S	5-15	ND	MW-81	5-20	22
OUMW-25S	5-15	ND	MW-82	5-20	624
OUMW-26S	5-11	ND	MW-83	5-20	ND
OUMW-28S	5-15	ND	MW-85-02S	5-15	3
OUMW-30S	5-15	10	PDMW-01	5-20	ND
OUMW-32S	5-15	63	PDMW-02	5-20	2,797
OUMW-33S	5-15	ND	PDMW-03	5-15	2,100
OUMW-34S	5-15	ND	SV-02	2-12	ND
OUMW-35S	5-15	ND	SV-03	2-12	ND
OUMW-36S	5-15	ND	OU-4		
OUMW-37S	5-15	ND	WCMW-01S	2-12	ND
OUMW-38S	5-15	ND	WCMW-02S	3-13	ND
OUMW-39S	5-15	ND	WCMW-03S	4.93-9.83	243
OUMW-40S	5-15	ND	WCMW-04S	1.5-11.5	43
OUMW-41S	5-15	ND	WCMW-05S	1.4-11.4	5
OUMW-45S	5-15	9	WCMW-06S	2-12	ND
OUMW-46S	5-15	31	WCMW-09S	5-15	ND
OUMW-47S	5-15	ND	WCMW-11S	5-15	624
OUMW-48S	5-15	ND	WCMW-12S	3-13	4
OUMW-49S	5-15	ND	WCMW-13S	3-13	ND
OUMW-18S	5-15	ND	WCMW-14S	2-12	ND
OUMW-22S	5-15	1,890	WCMW-16S	2-12	24
			WCMW-17S	2-12	245

Q1 2022



Q1 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2		
BBMW-22S	5-10	1754.59
BBMW-27S	5-15	ND
BBMW-34S	5-15	61.5
BBMW-37S	5-10	ND
BBMW-38S	5-15	46.7
BBMW-39S	5-15	ND
BBMW-41S	6-16	1289.9
BBMW-42S	5-10	0.99
MW-05S	4-14	674.4
MW-09S	4-14	ND
OUIPZ-101	4-14	22.1
OUIPZ-102	4-14	ND
OUIPZ-103	4-14	126.8
OUIPZ-104	4-14	ND
OUIPZ-105	4-14	53.8
OUMW-12S	3-7	ND
OUMW-27S	5-15	ND
OUMW-28S	5-15	ND
OUMW-30S	5-15	ND
OUMW-39S	5-15	ND
OUMW-40S	5-15	ND
OUMW-41S	5-15	ND
OUMW-47S	5-15	ND
OUMW-50S	5-15	ND
OUMW-57S	5-15	2.1
OZMW-16S	5-15	ND
OZMW-17S	5-15	ND
OZMW-18S	5-15	ND
OZMW-19S	5-15	3.4
OZMW-23S	5-15	ND
OZMW-24S	3-15	ND
OZMW-25S	5-15	158.2
OU-3		
MW-83	5-20	ND
OUMW-07S	3-13	ND
OUMW-08S	2-12	172.8
OUMW-13S	2-12	ND
OUMW-16S	2-12	6.9
OUMW-19S	2-12	ND
OUMW-20S	2-12	ND

LEGEND:

- BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- µg/L MICROGRAMS PER LITER
- PAH POLYCYCLIC AROMATIC HYDROCARBONS
- TOTAL PAH ≥ 100 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters Former MGP Site
Bay Shore, New York

nationalgrid

GEI Consultants

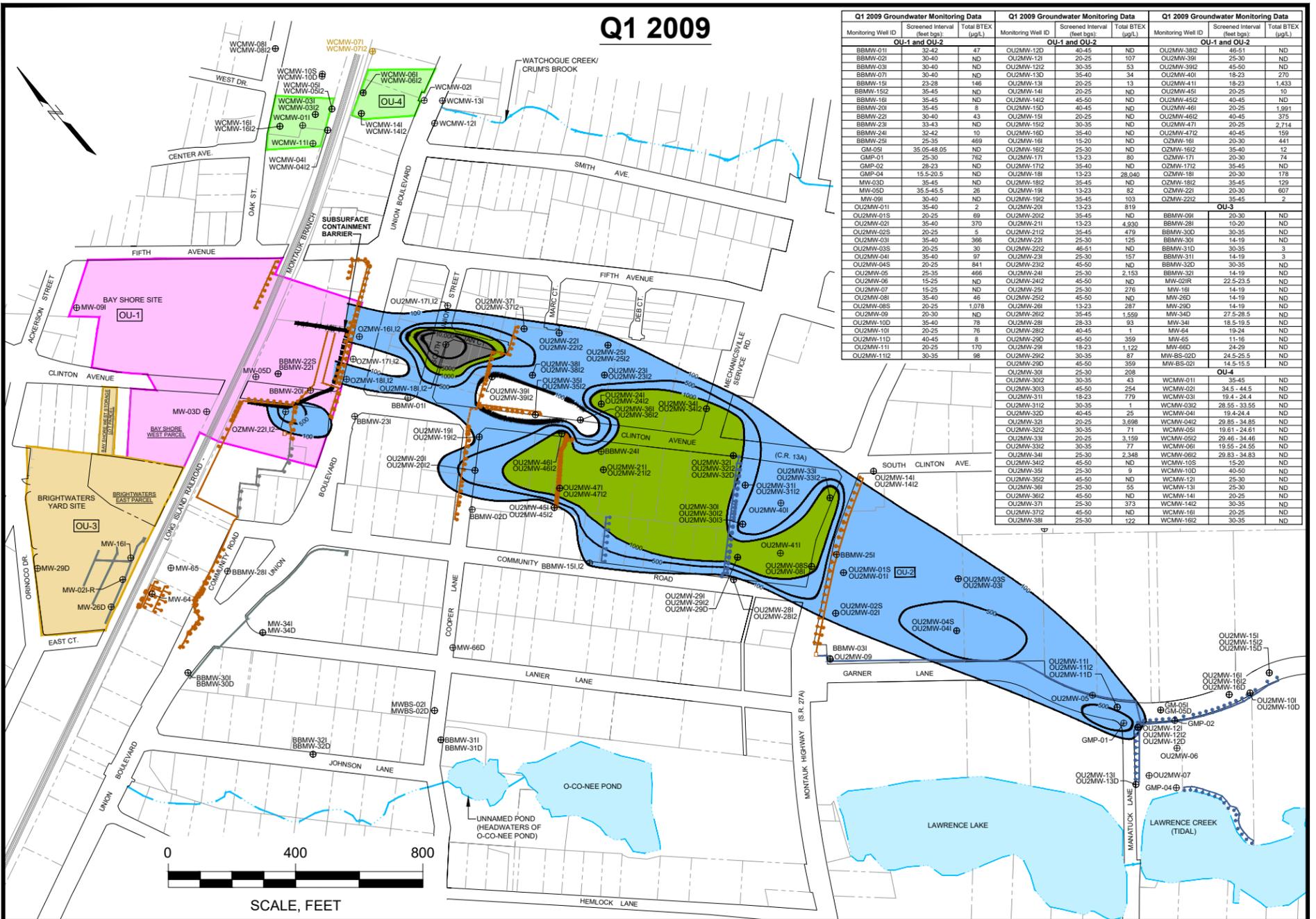
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WATER TABLE GROUNDWATER TOTAL PAH ISO-CONCENTRATION MAPS (0-10 FEET BGS)

August 2022

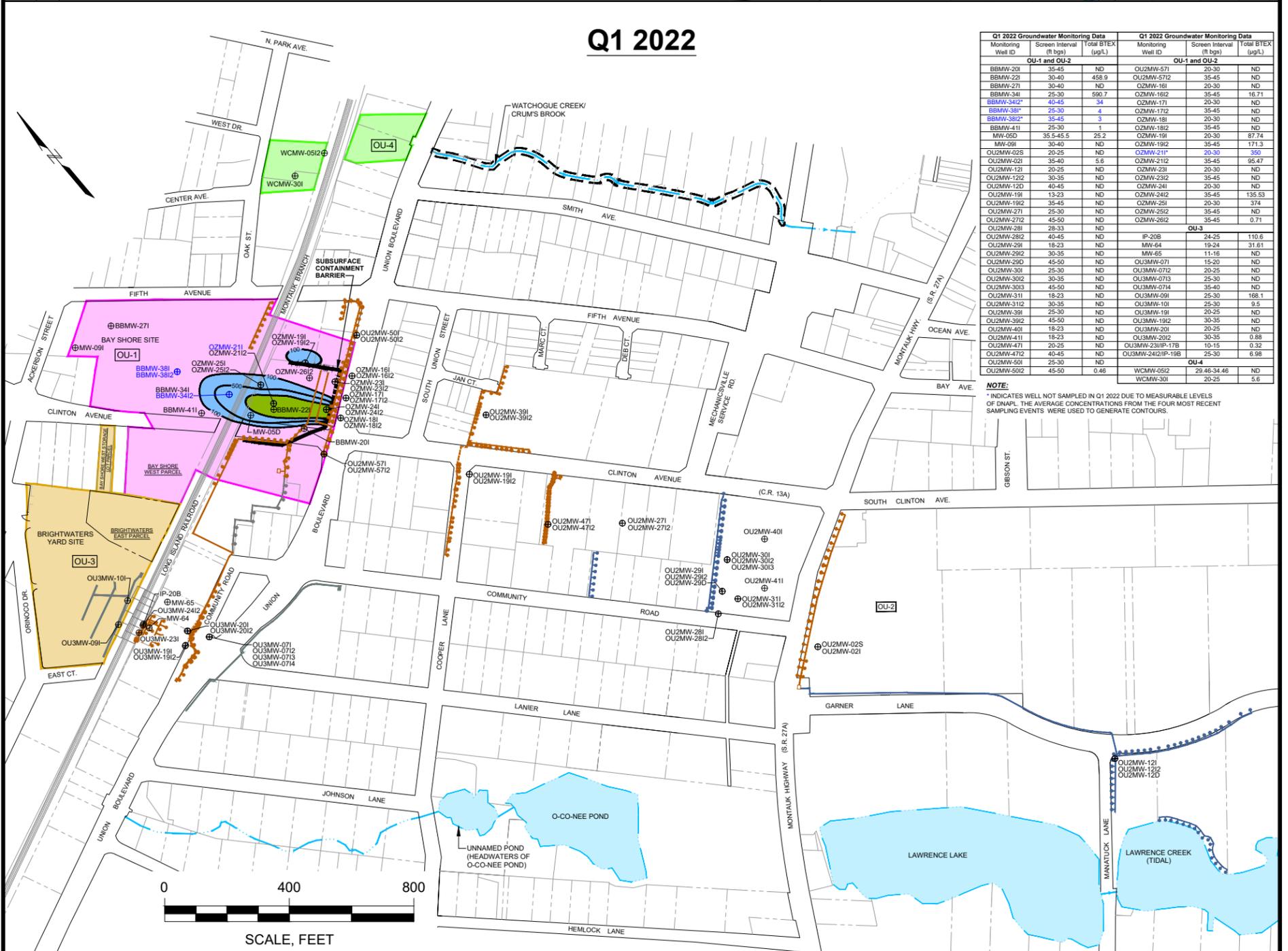
Fig. 4

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2			OU-1 and OU-2		
BBMW-011	32-42	47	OU2MW-12D	40-45	ND	OU2MW-38I2	40-51	ND
BBMW-021	30-40	ND	OU2MW-121	20-25	107	OU2MW-391	25-30	ND
BBMW-031	30-40	ND	OU2MW-122	30-35	53	OU2MW-392	45-50	ND
BBMW-071	30-40	ND	OU2MW-123	35-40	34	OU2MW-401	15-23	270
BBMW-151	23-28	146	OU2MW-131	20-25	13	OU2MW-411	18-23	1,433
BBMW-152	35-45	ND	OU2MW-141	20-25	ND	OU2MW-451	20-25	10
BBMW-161	35-45	ND	OU2MW-142	45-50	ND	OU2MW-452	40-45	ND
BBMW-201	35-45	8	OU2MW-151	40-45	ND	OU2MW-461	20-25	1,991
BBMW-221	30-40	43	OU2MW-151	20-25	ND	OU2MW-462	40-45	375
BBMW-231	33-43	ND	OU2MW-152	30-35	ND	OU2MW-471	20-25	2,714
BBMW-241	32-42	10	OU2MW-160	35-40	ND	OU2MW-472	40-45	159
BBMW-281	25-35	469	OU2MW-161	15-20	ND	OU2MW-481	20-30	441
GM-051	35.05-48.05	ND	OU2MW-162	25-30	ND	OU2MW-162	35-40	12
GMP-01	25-30	762	OU2MW-171	13-23	80	OU2MW-171	20-30	74
GMP-02	28-33	ND	OU2MW-172	35-40	ND	OU2MW-172	35-45	ND
GMP-04	15.5-20.5	ND	OU2MW-181	13-23	28,040	OU2MW-181	20-30	178
MW-03D	35-45	ND	OU2MW-182	35-45	ND	OU2MW-182	35-45	129
MW-05D	35.5-45.5	26	OU2MW-191	13-23	82	OU2MW-221	20-30	607
MW-091	30-40	ND	OU2MW-192	35-45	103	OU2MW-222	35-45	2
OU2MW-011	35-40	2	OU2MW-201	13-23	819	OU-3		
OU2MW-015	20-25	69	OU2MW-202	35-45	ND	BBMW-091	20-30	ND
OU2MW-021	35-40	370	OU2MW-211	13-23	4,930	BBMW-281	10-20	ND
OU2MW-023	20-25	5	OU2MW-212	35-45	479	BBMW-300	30-35	ND
OU2MW-031	35-40	366	OU2MW-221	25-30	125	BBMW-301	14-19	ND
OU2MW-035	20-25	30	OU2MW-222	46-51	ND	BBMW-31D	30-35	3
OU2MW-041	35-40	97	OU2MW-231	25-30	157	BBMW-311	14-19	3
OU2MW-045	20-25	841	OU2MW-232	45-50	ND	BBMW-32D	30-35	ND
OU2MW-05	25-35	466	OU2MW-241	25-30	2,153	BBMW-321	14-19	ND
OU2MW-06	15-25	ND	OU2MW-242	45-50	ND	MW-021R	22.5-23.5	ND
OU2MW-07	15-25	ND	OU2MW-251	25-30	276	MW-181	14-19	ND
OU2MW-08	35-40	46	OU2MW-252	40-45	ND	MW-26D	14-19	ND
OU2MW-08S	20-25	1,078	OU2MW-261	13-23	287	MW-29D	14-19	ND
OU2MW-09	20-30	ND	OU2MW-262	35-45	1,559	MW-34D	27.5-28.5	ND
OU2MW-10D	35-40	78	OU2MW-281	25-33	93	MW-341	18.5-19.5	ND
OU2MW-10S	20-25	78	OU2MW-282	40-45	1	MW-44	10-20	ND
OU2MW-11D	40-45	8	OU2MW-290	45-50	359	MW-65	11-16	ND
OU2MW-111	20-25	170	OU2MW-291	18-23	1,122	MW-65D	24-29	ND
OU2MW-112	30-35	98	OU2MW-292	30-35	87	MW-65D2	24.5-25.5	ND
			OU2MW-293	45-50	359	MW-65D21	14.5-15.5	ND
			OU2MW-301	25-30	208	OU-4		
			OU2MW-302	30-35	43	WCMW-011	35-45	ND
			OU2MW-303	45-50	254	WCMW-012	34.5-44.5	ND
			OU2MW-311	18-23	779	WCMW-031	19.4-24.4	ND
			OU2MW-312	30-35	1	WCMW-032	28.55-33.55	ND
			OU2MW-32D	40-45	25	WCMW-041	19-24.4	ND
			OU2MW-321	20-25	3,698	WCMW-042	29.85-34.85	ND
			OU2MW-322	30-35	3,159	WCMW-051	19.61-24.61	ND
			OU2MW-331	20-25	3,159	WCMW-052	20.46-34.46	ND
			OU2MW-332	30-35	77	WCMW-061	19.55-24.55	ND
			OU2MW-341	25-30	2,348	WCMW-081	29.83-34.83	ND
			OU2MW-342	45-50	ND	WCMW-10S	15-20	ND
			OU2MW-351	25-30	9	WCMW-10D	40-50	ND
			OU2MW-352	45-50	ND	WCMW-121	25-30	ND
			OU2MW-361	25-30	55	WCMW-131	25-30	ND
			OU2MW-362	45-50	ND	WCMW-141	20-25	ND
			OU2MW-371	25-30	373	WCMW-142	30-35	ND
			OU2MW-372	45-50	ND	WCMW-161	20-25	ND
			OU2MW-381	25-30	122	WCMW-182	39-35	ND

Q1 2022



Q1 2022 Groundwater Monitoring Data			Q1 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2			OU-1 and OU-2		
BBMW-201	35-45	ND	OU2MW-571	20-30	ND
BBMW-221	30-40	458.9	OU2MW-572	35-45	ND
BBMW-271	30-40	ND	OZMW-161	20-30	ND
BBMW-341	25-30	590.7	OZMW-162	35-45	16.71
BBMW-342*	40-45	34	OZMW-171	20-30	ND
BBMW-382*	35-45	3	OZMW-172	35-45	ND
BBMW-411	25-30	1	OZMW-181	20-30	ND
BBMW-411	25-30	1	OZMW-182	35-45	ND
MW-05D	35.5-45.5	25.2	OZMW-191	20-30	87.74
MW-091	30-40	ND	OZMW-192	35-45	171.3
OU2MW-02S	20-25	ND	OZMW-211*	20-30	350
OU2MW-021	35-40	5.6	OZMW-212	35-45	95.47
OU2MW-121	20-25	ND	OZMW-231	20-30	ND
OU2MW-122	30-35	ND	OZMW-232	35-45	ND
OU2MW-123	40-45	ND	OZMW-241	20-30	ND
OU2MW-191	13-23	ND	OZMW-242	35-45	135.53
OU2MW-192	35-45	ND	OZMW-251	20-30	374
OU2MW-271	25-30	ND	OZMW-252	35-45	ND
OU2MW-272	45-50	ND	OZMW-262	35-45	0.71
OU2MW-281	28-33	ND	OU-3		
OU2MW-282	40-45	ND	IP-20B	24-25	110.6
OU2MW-291	18-23	ND	MW-64	19-24	31.61
OU2MW-292	30-35	ND	MW-65	11-16	ND
OU2MW-29D	45-50	ND	OU3MW-071	15-20	ND
OU2MW-301	25-30	ND	OU3MW-072	20-25	ND
OU2MW-302	30-35	ND	OU3MW-073	25-30	ND
OU2MW-303	45-50	ND	OU3MW-074	30-40	ND
OU2MW-311	18-23	ND	OU3MW-091	25-30	168.1
OU2MW-312	30-35	ND	OU3MW-101	25-30	9.5
OU2MW-391	25-30	ND	OU3MW-191	20-25	ND
OU2MW-392	45-50	ND	OU3MW-192	30-35	ND
OU2MW-393	18-23	ND	OU3MW-201	20-25	ND
OU2MW-411	18-23	ND	OU3MW-202	30-35	0.88
OU2MW-471	20-25	ND	OU3MW-231P-17B	10-15	0.32
OU2MW-472	40-45	ND	OU3MW-242IP-19B	25-30	6.98
OU2MW-501	25-30	ND	OU-4		
OU2MW-502	45-50	0.46	WCMW-052	29.46-34.46	ND
			WCMW-301	20-25	5.6

NOTE: * INDICATES WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- ΦBBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- ΦBBMW-381 WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- BTEX ≥ 100 µg/L
- BTEX BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

NOTE: WINDOW SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

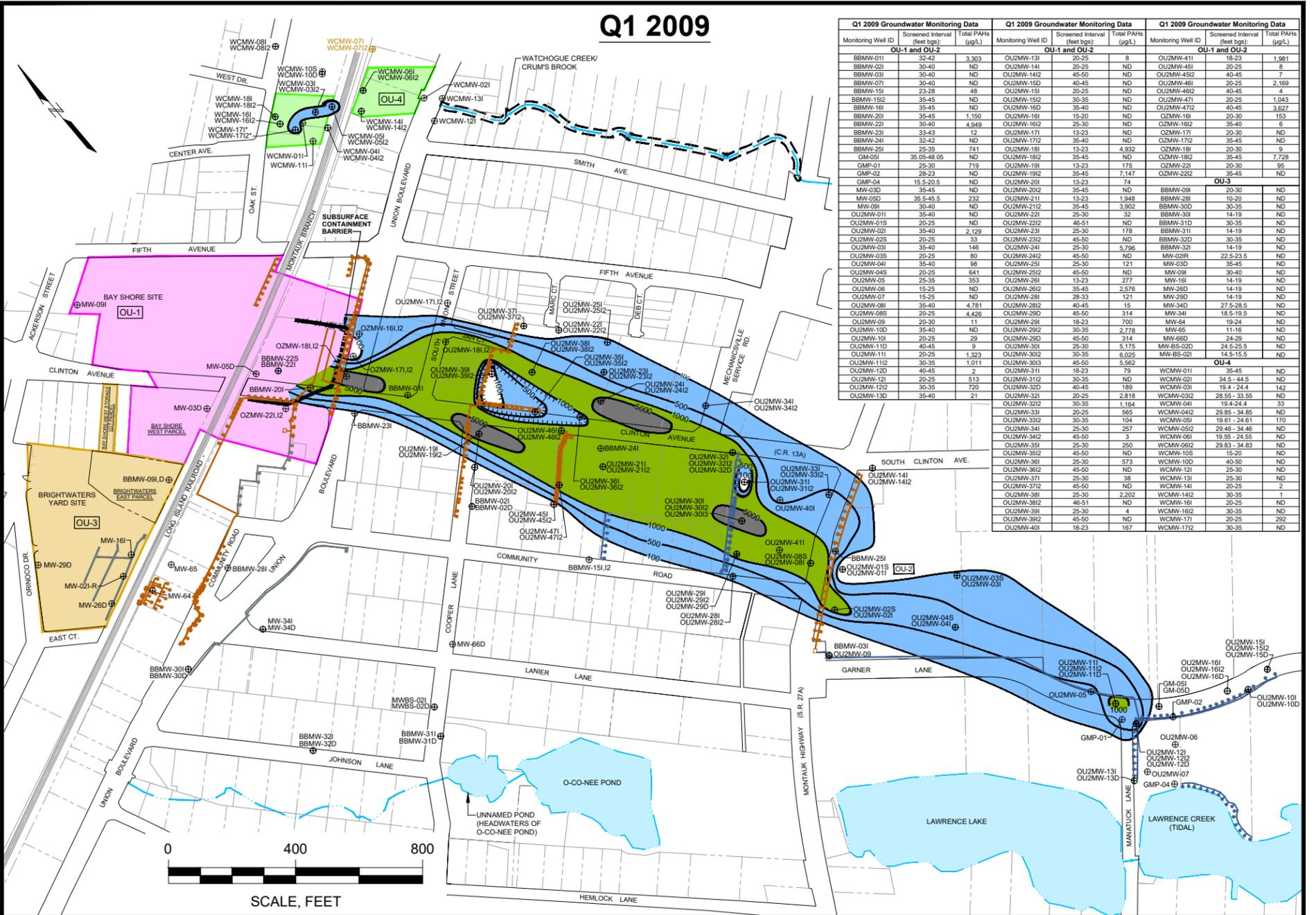
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INTERMEDIATE GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(10-50 FEET BGS)

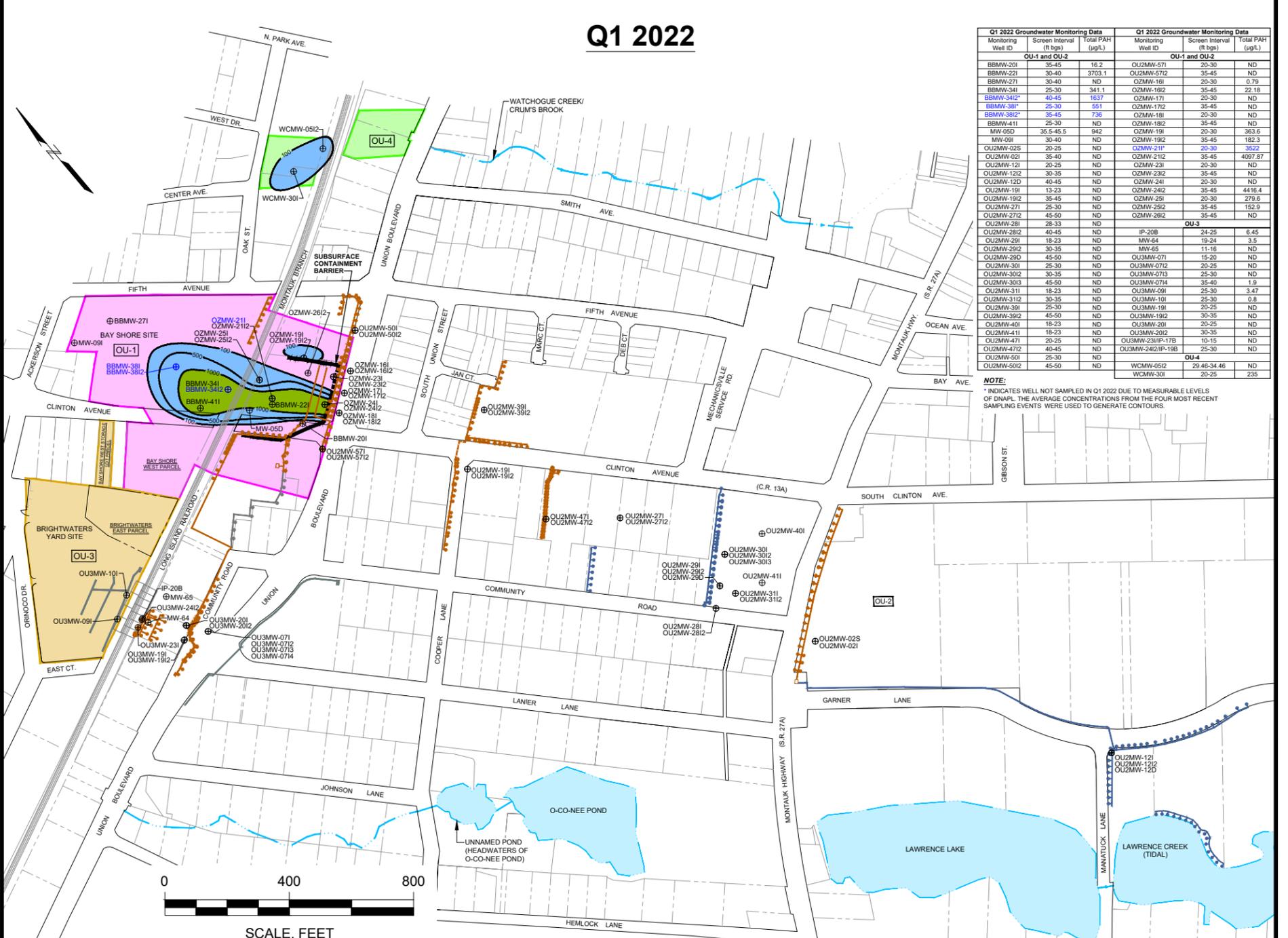
Project 1905774 August 2022 Fig. 5

Q1 2009



Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data			Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)	Monitoring Well ID	Screened Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2								
BBMW-011	32-42	3,303	OU2MW-131	20-25	8	OU2MW-411	18-23	1,981
BBMW-021	30-40	ND	OU2MW-141	20-25	ND	OU2MW-451	20-25	8
BBMW-031	30-40	ND	OU2MW-142	45-50	ND	OU2MW-492	40-45	7
BBMW-071	30-40	ND	OU2MW-150	40-45	ND	OU2MW-461	20-25	2,169
BBMW-151	23-28	48	OU2MW-151	20-25	ND	OU2MW-482	40-45	4
BBMW-192	35-45	ND	OU2MW-152	30-35	ND	OU2MW-471	20-25	1,043
BBMW-161	35-45	ND	OU2MW-160	35-40	ND	OU2MW-472	40-45	3,627
BBMW-201	35-45	1,150	OU2MW-161	15-20	ND	OU2MW-181	20-30	153
BBMW-221	30-40	4,949	OU2MW-162	25-30	ND	OZMW-162	35-40	6
BBMW-231	33-43	12	OU2MW-171	13-23	ND	OZMW-171	20-30	ND
BBMW-241	32-42	ND	OU2MW-172	35-40	ND	OZMW-172	35-45	ND
BBMW-251	25-35	741	OU2MW-181	13-23	4,932	OZMW-181	20-30	9
GM-051	35.05-48.05	ND	OU2MW-182	35-45	ND	OZMW-182	35-45	7,728
GMP-01	25-30	719	OU2MW-191	13-23	175	OZMW-221	20-30	95
GMP-02	28-33	ND	OU2MW-192	35-45	1,147	OZMW-222	35-45	ND
GMP-04	15.5-20.5	ND	OU2MW-201	13-23	74	OU-3		
MW-03D	35-45	ND	OU2MW-202	35-45	ND	BBMW-091	20-30	ND
MW-05D	35.5-45.5	232	OU2MW-211	13-23	1,948	BBMW-281	10-20	ND
MW-091	30-40	ND	OU2MW-212	35-45	3,902	BBMW-300	30-35	ND
OU2MW-011	35-40	ND	OU2MW-221	25-30	32	BBMW-301	14-19	ND
OU2MW-015	20-25	ND	OU2MW-222	46-51	ND	BBMW-31D	30-35	ND
OU2MW-021	38-40	2,129	OU2MW-231	25-30	178	BBMW-311	14-19	ND
OU2MW-025	20-25	33	OU2MW-232	45-50	ND	BBMW-32D	30-35	ND
OU2MW-031	35-40	146	OU2MW-241	25-30	5,796	BBMW-321	14-19	ND
OU2MW-035	20-25	80	OU2MW-242	45-50	ND	MW-02R	22-23.5	ND
OU2MW-041	35-40	88	OU2MW-251	25-30	121	MW-03D	35-45	ND
OU2MW-045	20-25	641	OU2MW-252	45-50	ND	MW-091	30-40	ND
OU2MW-05	25-35	353	OU2MW-261	13-23	277	MW-161	14-19	ND
OU2MW-06	15-25	ND	OU2MW-262	35-45	2,576	MW-26D	14-19	ND
OU2MW-07	15-25	ND	OU2MW-281	28-33	121	MW-29D	14-19	ND
OU2MW-081	35-40	4,781	OU2MW-282	40-45	15	MW-34D	27-28.5	ND
OU2MW-085	20-25	4,426	OU2MW-290	45-50	314	MW-341	18.5-19.5	ND
OU2MW-09	20-30	11	OU2MW-291	18-23	700	MW-64	19-24	ND
OU2MW-10	35-40	ND	OU2MW-292	35-45	2,778	MW-65	11-16	ND
OU2MW-101	20-25	29	OU2MW-29D	45-50	314	MW-85D	24-29	ND
OU2MW-11D	40-45	9	OU2MW-301	25-30	5,175	MW-85-02D	24-25.5	ND
OU2MW-111	20-25	1,323	OU2MW-302	30-35	6,025	MW-85-021	14-15.5	ND
OU2MW-112	30-35	1,011	OU2MW-303	45-50	5,582	OU-4		
OU2MW-12D	40-45	2	OU2MW-311	18-23	79	WCMW-011	35-45	ND
OU2MW-121	20-25	513	OU2MW-312	30-35	ND	WCMW-021	34.5-44.5	ND
OU2MW-122	30-35	720	OU2MW-32D	40-45	189	WCMW-031	19-24.4	142
OU2MW-13D	35-40	21	OU2MW-321	23-25	2,818	WCMW-032	25.5-30.55	ND
			OU2MW-322	30-35	1,164	WCMW-041	19-24.4	33
			OU2MW-331	20-25	565	WCMW-042	29.85-34.85	ND
			OU2MW-332	30-35	104	WCMW-051	19.61-24.61	170
			OU2MW-341	23-25	257	WCMW-052	22.45-34.45	ND
			OU2MW-342	45-50	3	WCMW-061	19.55-24.55	ND
			OU2MW-351	25-30	250	WCMW-062	29.83-34.83	ND
			OU2MW-352	45-50	ND	WCMW-105	15-20	ND
			OU2MW-361	25-30	257	WCMW-106	40-50	ND
			OU2MW-362	45-50	ND	WCMW-121	25-30	ND
			OU2MW-371	25-30	38	WCMW-131	25-30	ND
			OU2MW-372	45-50	ND	WCMW-141	20-25	2
			OU2MW-381	30-40	2	WCMW-142	30-35	1
			OU2MW-382	46-51	ND	WCMW-161	20-25	ND
			OU2MW-391	25-30	4	WCMW-162	30-35	ND
			OU2MW-392	45-50	ND	WCMW-171	20-25	292
			OU2MW-401	18-23	167	WCMW-172	30-35	ND

Q1 2022



Q1 2022 Groundwater Monitoring Data			Q1 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)	Monitoring Well ID	Screen Interval (ft bgs)	Total PAH (µg/L)
OU-1 and OU-2					
BBMW-201	35-45	18.2	OU2MW-571	20-30	ND
BBMW-221	30-40	3703.1	OU2MW-572	35-45	ND
BBMW-271	30-40	ND	OZMW-161	20-30	0.79
BBMW-341	25-30	341.1	OZMW-162	35-45	22.18
BBMW-342*	40-45	1637	OZMW-171	20-30	ND
BBMW-381*	25-30	2,818	OZMW-172	35-45	ND
BBMW-382*	35-45	738	OZMW-181	20-30	ND
BBMW-411	25-30	ND	OZMW-182	35-45	ND
MW-05D	35.5-45.5	942	OZMW-191	20-30	363.6
MW-091	30-40	ND	OZMW-192	35-45	182.3
OU2MW-025	20-25	ND	OZMW-211*	30-30	352.2
OU2MW-021	35-40	ND	OZMW-212	35-45	4097.87
OU2MW-121	20-25	ND	OZMW-231	20-30	ND
OU2MW-123	35-35	ND	OZMW-232	35-45	ND
OU2MW-12D	40-45	ND	OZMW-241	20-30	ND
OU2MW-191	13-23	ND	OZMW-242	35-45	4416.4
OU2MW-192	35-45	ND	OZMW-251	20-30	279.6
OU2MW-271	25-30	ND	OZMW-292	35-45	152.9
OU2MW-272	45-50	ND	OZMW-282	35-45	ND
OU2MW-281	28-33	ND	OU-3		
OU2MW-282	40-45	ND	IP-20B	24-25	6.45
OU2MW-291	18-23	ND	MW-64	19-24	3.5
OU2MW-292	30-35	ND	MW-65	11-16	ND
OU2MW-29D	45-50	ND	OU3MW-071	15-20	ND
OU2MW-301	25-30	ND	OU3MW-072	20-25	ND
OU2MW-302	30-35	ND	OU3MW-073	25-30	ND
OU2MW-303	45-50	ND	OU3MW-074	35-40	1.9
OU2MW-311	18-23	ND	OU3MW-091	25-30	3.47
OU2MW-312	30-35	ND	OU3MW-101	25-30	0.8
OU2MW-391	25-30	ND	OU3MW-191	20-25	ND
OU2MW-392	45-50	ND	OU3MW-192	30-35	ND
OU2MW-401	18-23	ND	OU3MW-202	40-45	ND
OU2MW-411	18-23	ND	OU3MW-2012	30-35	ND
OU2MW-471	20-25	ND	OU3MW-231P-17B	10-15	ND
OU2MW-472	40-45	ND	OU3MW-242IP-19B	25-30	ND
OU2MW-501	25-30	ND	OU-4		
OU2MW-502	45-50	ND	WCMW-0512	29.48-34.48	ND
			WCMW-301	20-25	235

NOTE: * INDICATES WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- BBMW-33: EXISTING MONITORING WELL CLUSTER LOCATION
- BBMW-381: WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L: MICROGRAMS PER LITER
- NOTE: WINDOWED SECTION OF THE SUBSURFACE CONTAINMENT BARRIER WALL CONSTRUCTED BETWEEN APPROXIMATELY 8 AND 38 FEET BELOW GROUND SURFACE (BGS).
- TOTAL PAH ≥ 100 µg/L
- TOTAL PAH ≥ 1,000 µg/L
- TOTAL PAH ≥ 5,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)
- PAH: POLYCYCLIC AROMATIC HYDROCARBONS

Bay Shore/Brightwaters
Former MGP Site
Bay Shore, New York

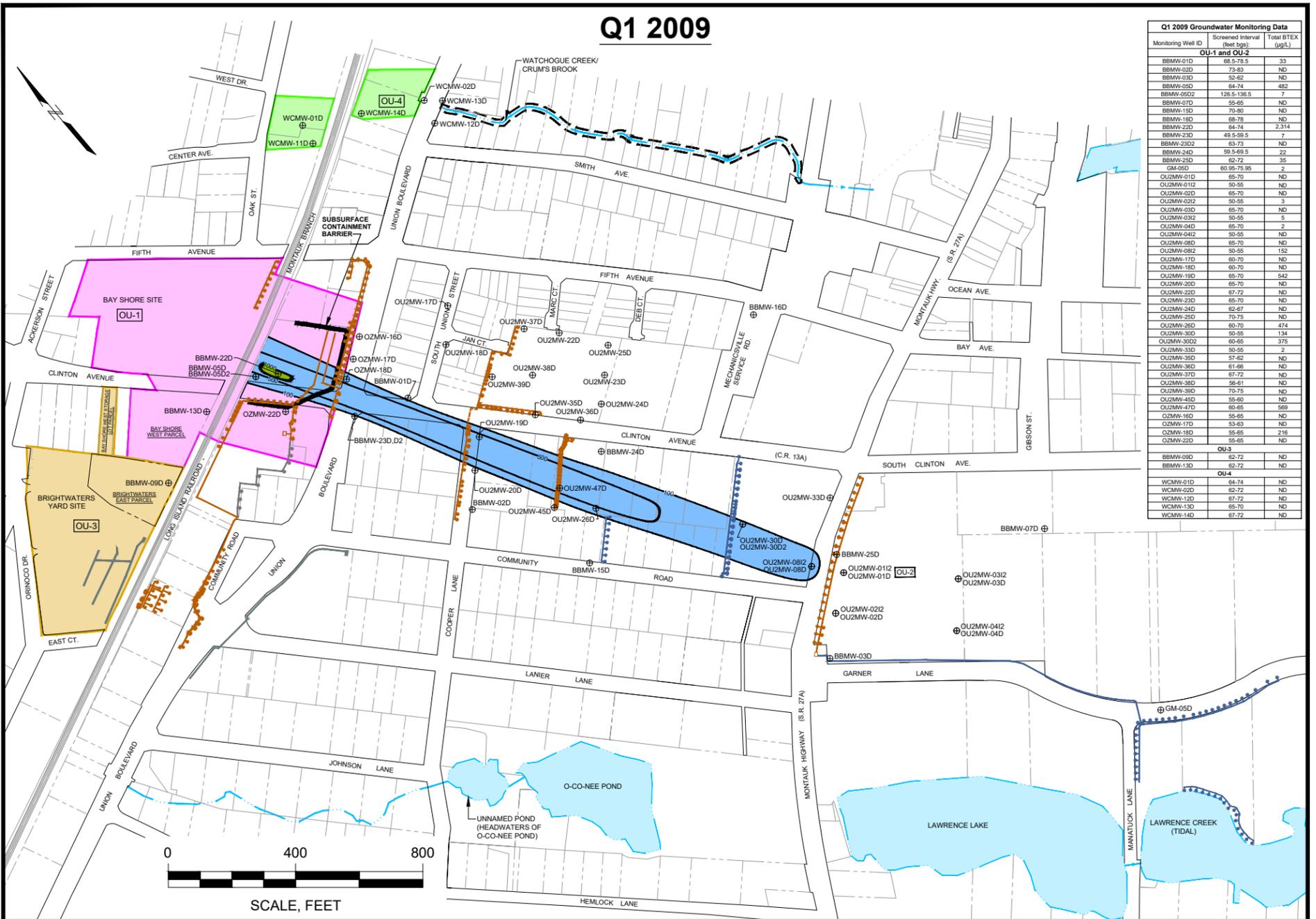
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INTERMEDIATE GROUNDWATER
TOTAL PAH
ISO-CONCENTRATION MAPS
(10-50 FEET BGS)

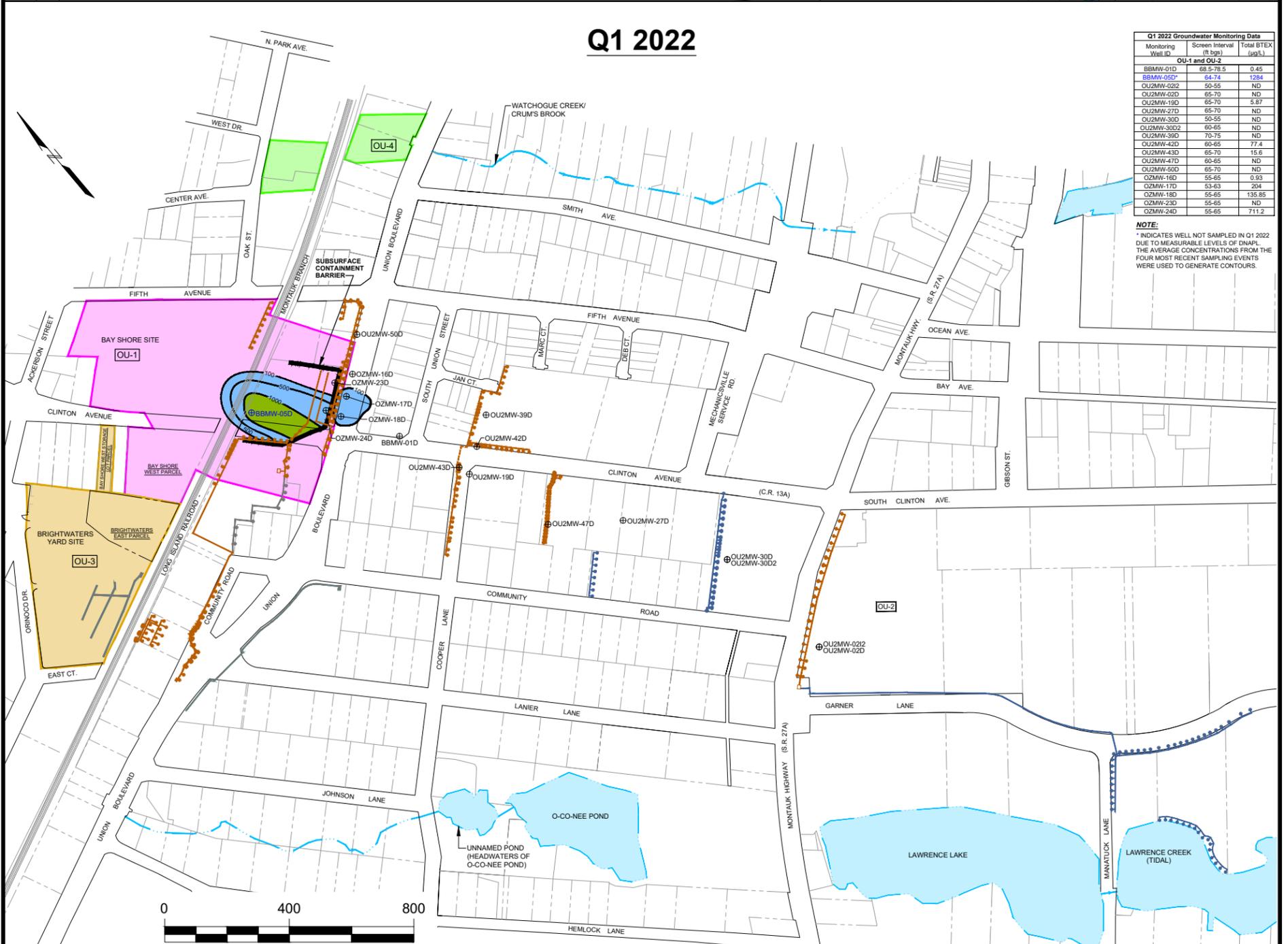
Project 1905774 August 2022 Fig. 6

Q1 2009



Q1 2009 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	33
BBMW-02D	73-83	ND
BBMW-03D	55-62	ND
BBMW-05D	84-74	482
BBMW-05D2	128.5-138.5	7
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-18D	68-78	ND
BBMW-22D	64-74	2,314
BBMW-23D	49.5-59.5	7
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	22
BBMW-25D	62-72	35
GM-05D	60.95-75.95	2
OUMW-01D	65-70	ND
OUMW-01D2	50-55	ND
OUMW-02D	65-70	ND
OUMW-02D2	50-55	3
OUMW-03D	65-70	ND
OUMW-03D2	50-55	5
OUMW-04D	65-70	2
OUMW-04D2	50-55	ND
OUMW-08D	65-70	ND
OUMW-08D2	50-55	152
OUMW-17D	60-70	ND
OUMW-18D	60-70	ND
OUMW-19D	60-70	542
OUMW-20D	65-70	ND
OUMW-22D	67-72	ND
OUMW-23D	65-70	ND
OUMW-24D	69-67	ND
OUMW-25D	70-75	ND
OUMW-26D	60-70	474
OUMW-30D	60-65	154
OUMW-30D2	60-65	375
OUMW-33D	60-65	2
OUMW-35D	57-62	ND
OUMW-36D	61-66	ND
OUMW-37D	67-72	ND
OUMW-38D	56-61	ND
OUMW-39D	70-75	ND
OUMW-45D	55-65	216
OUMW-47D	60-65	569
OUMW-16D	55-65	ND
OUMW-17D	53-63	ND
OUMW-18D	55-65	216
OUMW-22D	55-65	ND
OU-3		
BBMW-09D	62-72	ND
BBMW-13D	62-72	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	67-72	ND
WCMW-14D	65-70	ND
WCMW-14D	67-72	ND

Q1 2022



Q1 2022 Groundwater Monitoring Data		
Monitoring Well ID	Screened Interval (ft bgs)	Total BTEX (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	0.45
BBMW-05D*	64-74	1,294
OUMW-02D	50-55	ND
OUMW-02D2	65-70	ND
OUMW-19D	65-70	5.87
OUMW-27D	65-70	ND
OUMW-30D	50-55	ND
OUMW-30D2	60-65	ND
OUMW-39D	70-75	ND
OUMW-42D	60-65	77.4
OUMW-43D	65-70	15.6
OUMW-47D	60-65	ND
OUMW-50D	65-70	ND
OUMW-16D	55-65	0.93
OUMW-17D	53-63	294
OUMW-18D	55-65	135.85
OUMW-23D	55-65	ND
OUMW-24D	55-65	711.2

NOTE:
* INDICATES WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- BBMW-33: EXISTING MONITORING WELL CLUSTER LOCATION
- BBMW-05D: WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L: MICROGRAMS PER LITER
- BTEX: BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
- BTEX ≥ 100 µg/L: (Blue shaded area)
- BTEX ≥ 1,000 µg/L: (Green shaded area)
- OXYGEN INJECTION LINE - INSTALLED: (Orange dashed line)
- OXYGEN INJECTION LINE - SHUT OFF: (Blue dashed line)
- OXYGEN INJECTION LINE - ABANDONED: (Grey dashed line)
- ISO-CONCENTRATION LINE (µg/L): (Black solid line)

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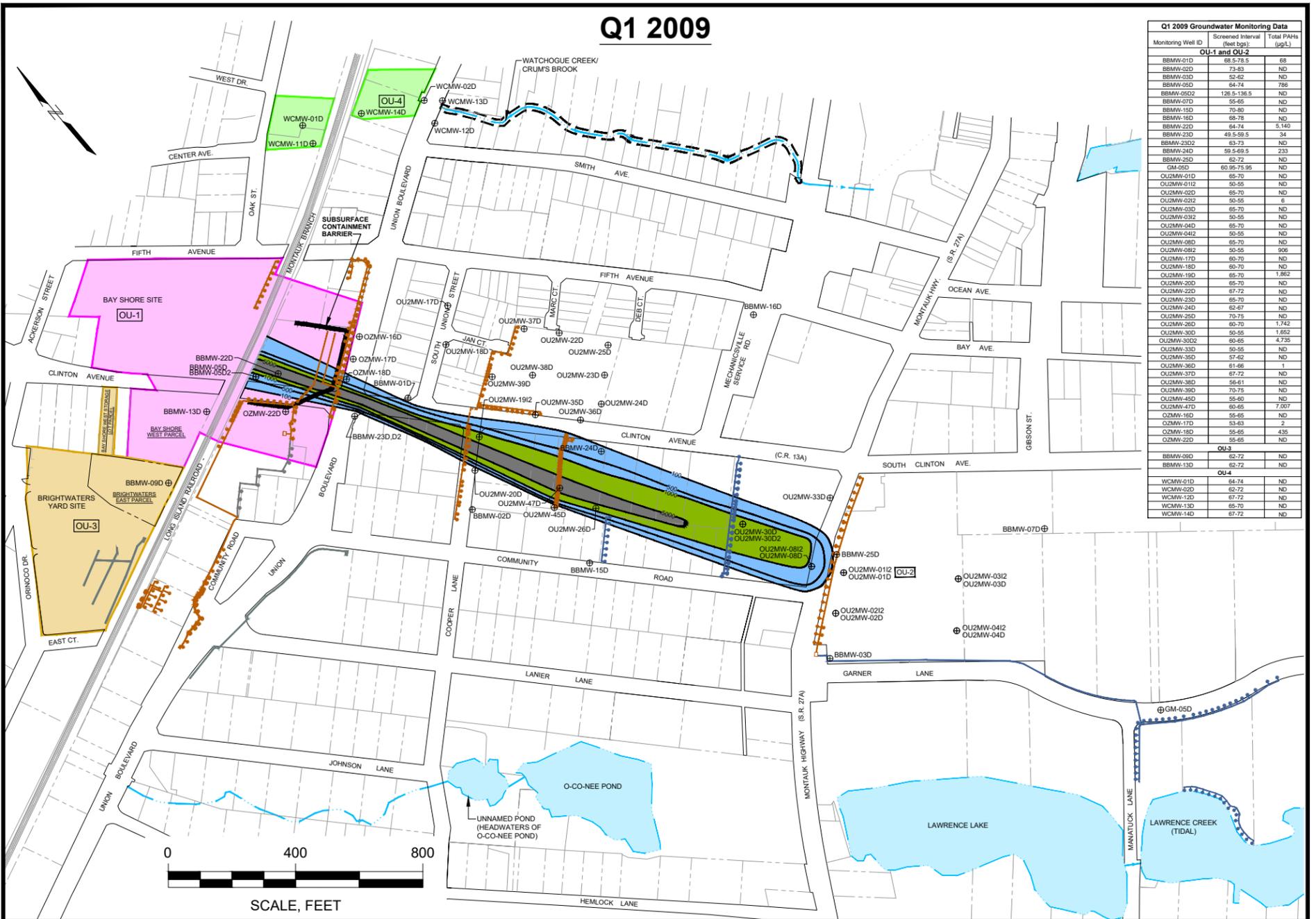
Project 1905774

DEEP GROUNDWATER
TOTAL BTEX
ISO-CONCENTRATION MAPS
(BELOW 50 FEET BGS)

August 2022

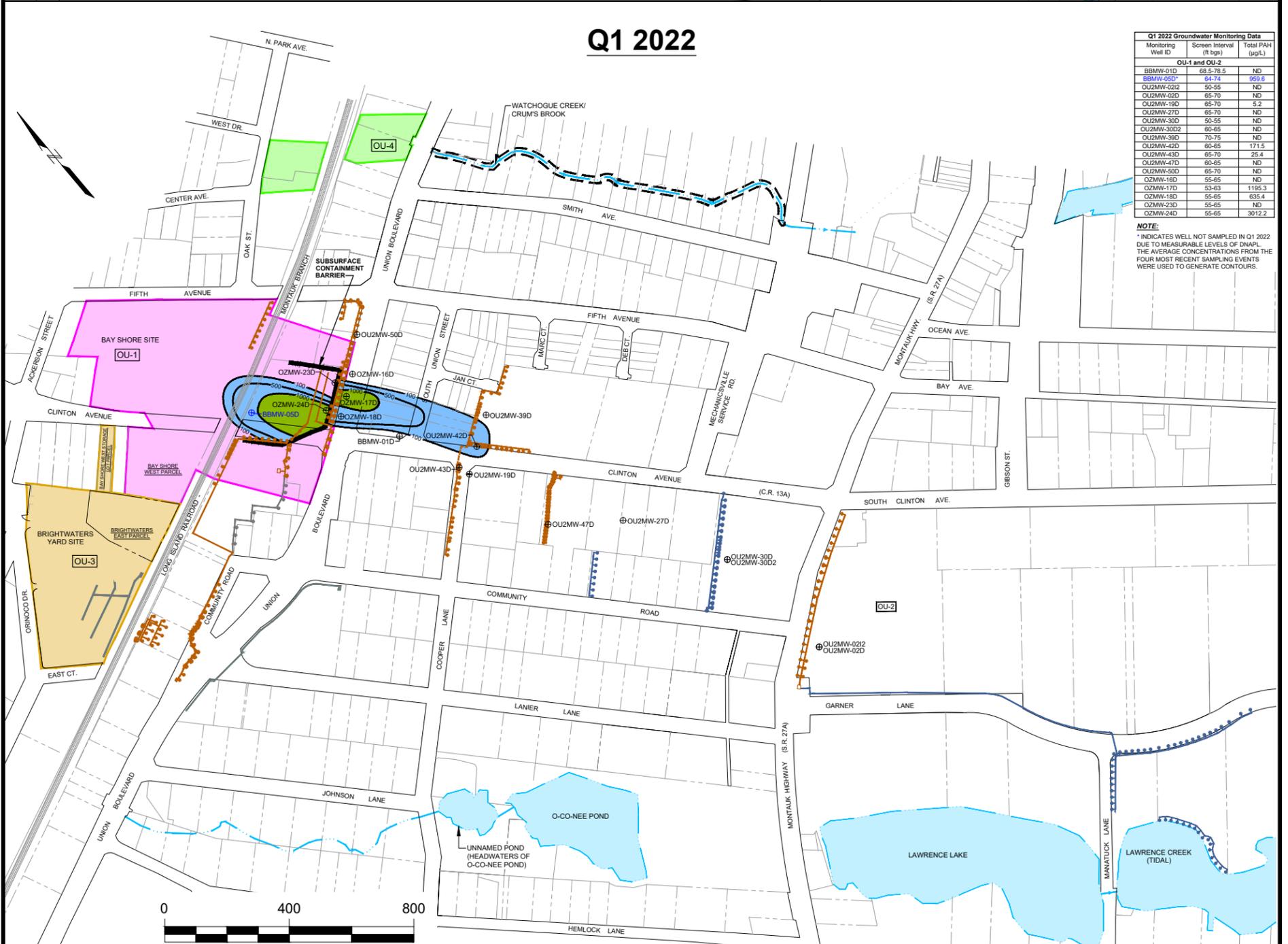
Fig. 7

Q1 2009



Monitoring Well ID	Screen Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	68
BBMW-02D	73-83	ND
BBMW-03D	53-62	ND
BBMW-05D	64-74	786
BBMW-05D2	126.5-136.5	ND
BBMW-07D	55-65	ND
BBMW-15D	70-80	ND
BBMW-16D	68-78	ND
BBMW-22D	64-74	5,140
BBMW-23D	49.5-59.5	34
BBMW-23D2	63-73	ND
BBMW-24D	59.5-69.5	233
BBMW-25D	62-72	ND
GM-05D	60.95-70.95	ND
OU2MW-01D	65-70	ND
OU2MW-01I2	59-65	ND
OU2MW-02D	65-70	ND
OU2MW-02I2	59-65	ND
OU2MW-03D	65-70	ND
OU2MW-03I2	59-65	ND
OU2MW-04D	65-70	ND
OU2MW-04I2	59-65	ND
OU2MW-08D	69-70	ND
OU2MW-08I2	59-65	906
OU2MW-17D	60-70	ND
OU2MW-18D	60-70	ND
OU2MW-19D	69-70	1,862
OU2MW-20D	65-70	ND
OU2MW-22D	67-72	ND
OU2MW-23D	65-70	ND
OU2MW-24D	62-67	ND
OU2MW-25D	70-75	ND
OU2MW-26D	66-70	1,742
OU2MW-30D	60-65	1,653
OU2MW-30D2	69-65	4,735
OU2MW-33D	59-65	ND
OU2MW-35D	57-62	ND
OU2MW-36D	61-66	1
OU2MW-39D	66-70	ND
OU2MW-42D	65-70	25.4
OU2MW-47D	60-65	7,007
OU2MW-18D	55-65	ND
OU2MW-17D	53-63	2
OU2MW-19D	55-65	435
OU2MW-22D	55-65	ND
OU-3		
BBMW-09D	62-72	ND
BBMW-13D	62-72	ND
OU-4		
WCMW-01D	64-74	ND
WCMW-02D	62-72	ND
WCMW-13D	62-72	ND
WCMW-14D	65-70	ND
WCMW-14D	67-72	ND

Q1 2022



Monitoring Well ID	Screen Interval (ft bgs)	Total PAHs (µg/L)
OU-1 and OU-2		
BBMW-01D	68.5-78.5	ND
BBMW-05D*	64-74	859.8
OU2MW-02I2	59-65	ND
OU2MW-02D	65-70	ND
OU2MW-19D	65-70	5.2
OU2MW-27D	65-70	ND
OU2MW-30D	59-65	ND
OU2MW-30D2	60-65	ND
OU2MW-39D	70-75	ND
OU2MW-42D	60-65	171.5
OU2MW-43D	65-70	25.4
OU2MW-47D	60-65	ND
OU2MW-50D	65-70	ND
OZMW-16D	55-65	ND
OZMW-17D	53-63	1195.3
OZMW-18D	55-65	635.4
OZMW-23D	55-65	ND
OZMW-24D	55-65	3012.2

NOTE:
 * INDICATES WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL. THE AVERAGE CONCENTRATIONS FROM THE FOUR MOST RECENT SAMPLING EVENTS WERE USED TO GENERATE CONTOURS.

LEGEND:

- ⊕BBMW-33 EXISTING MONITORING WELL CLUSTER LOCATION
- ⊕BBMW-05D WELL NOT SAMPLED IN Q1 2022 DUE TO MEASURABLE LEVELS OF DNAPL
- µg/L MICROGRAMS PER LITER
- PAH POLYCYCLIC AROMATIC HYDROCARBONS
- TOTAL PAH ≥ 100 µg/L
- TOTAL PAH ≥ 1,000 µg/L
- OXYGEN INJECTION LINE - INSTALLED
- OXYGEN INJECTION LINE - SHUT OFF
- OXYGEN INJECTION LINE - ABANDONED
- ISO-CONCENTRATION LINE (µg/L)

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DEEP GROUNDWATER
 TOTAL PAH
 ISO-CONCENTRATION MAPS
 (BELOW 50 FEET BGS)

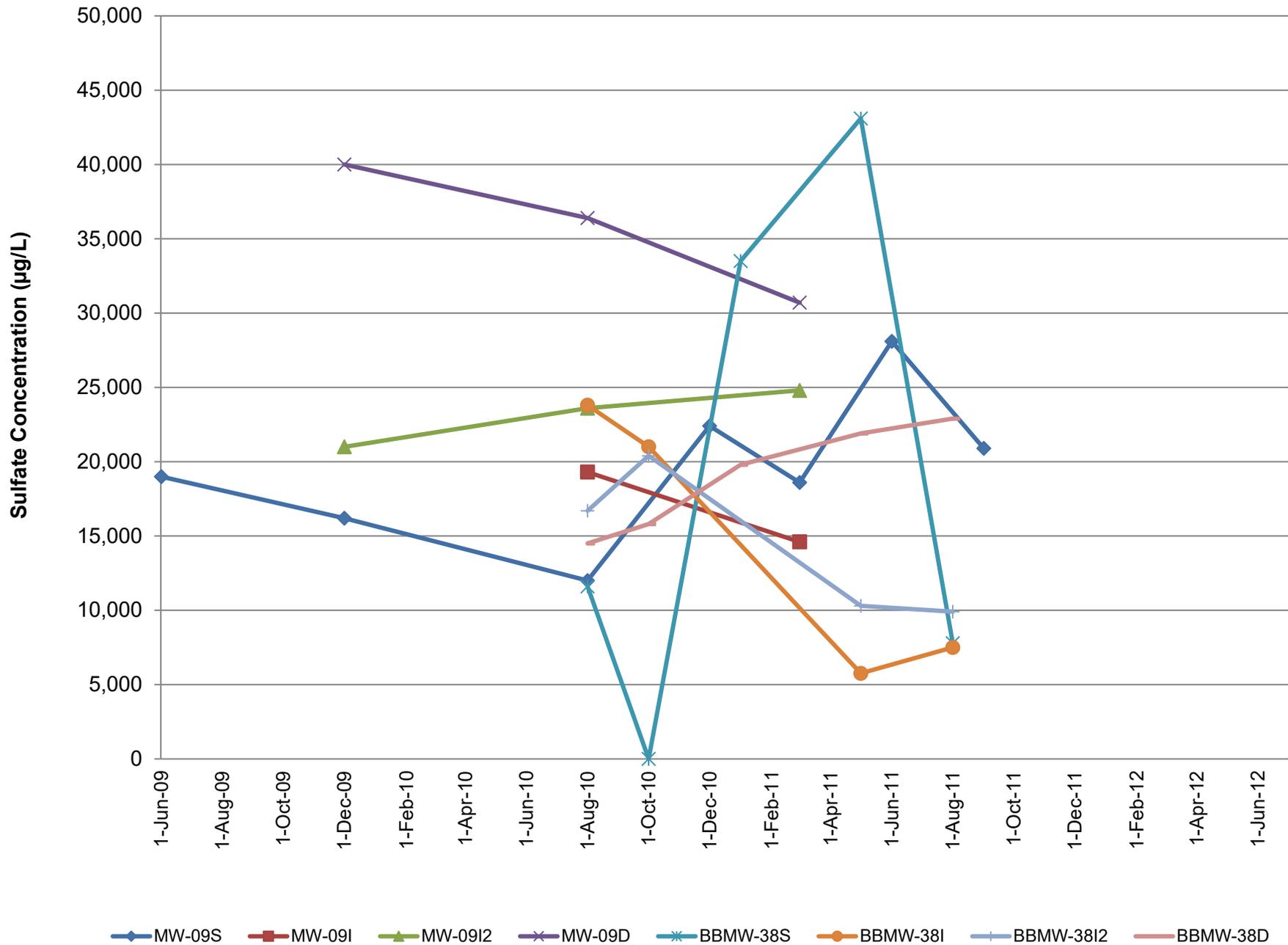
August 2022

Fig. 8

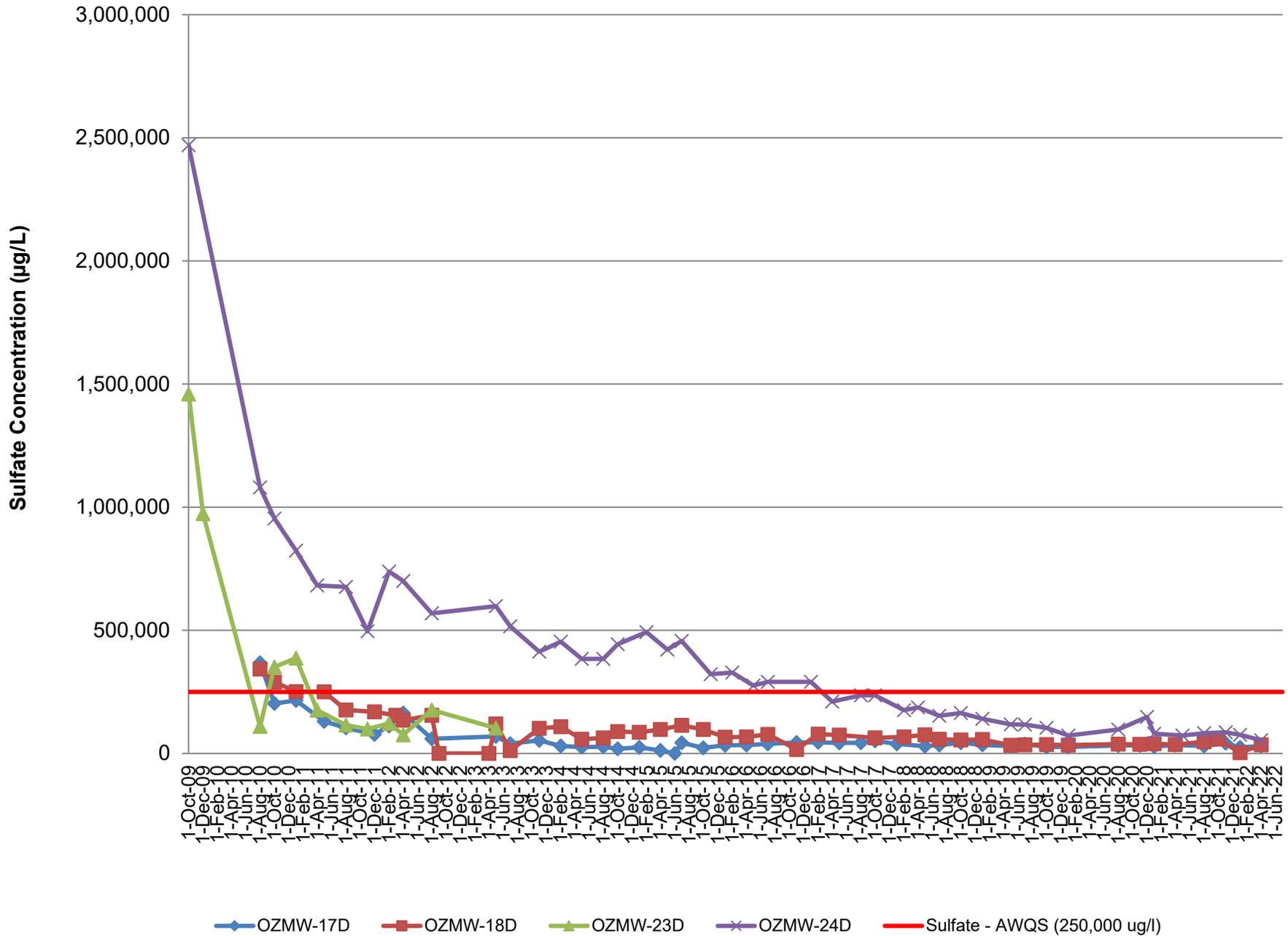
Appendix G

Summary of Sulfate Concentrations

Appendix G - Graph G-1 - Background Sulfate Concentrations OU-1 Wells Upgradient of In-Situ Remedial Action



Appendix G - Graph G-2 - Sulfate Concentrations OU-1 Wells Above AWQS Criteria (250,000 µg/L)



Appendix G - Graph G-3 - Sulfate Concentrations OU-2 Wells Above AWQS Criteria (250,000 µg/L)

