

NYSEG

ANNUAL PERIODIC REVIEW REPORT (Q39 THROUGH Q42)

Oneonta Former MGP Site

NYSDEC Site Number: 4-39-001

January, 2019

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ACRONYMS AND ABBREVIATIONS

AW application well

BDL below detection limits

bgs below ground surface

BTEX benzene, toluene, ethyl benzene, and xylenes

DNAPL dense non-aqueous-phase liquid

DUSRs Data Usability Summary Reports

MGP manufactured gas plant

MW monitoring well

NAPL non-aqueous phase liquid

NRWs NAPL recovery wells

NYSDEC New York State Department of Environmental Conservation

O&M operation and maintenance

PAH polycyclic aromatic hydrocarbon

PMWs performance monitoring wells

PZ piezometer

ROD Record of Decision

SG staff gauge

SMP Site Management Plan

μg/L micrograms per liter

USEPA United States Environmental Protection Agency

ES EXECUTIVE SUMMARY

This Annual Periodic Review Report (Annual PRR) summarizes the monitoring results obtained and operation and maintenance (O&M) activities conducted during the reporting period (December 2017 through December 2018) for the New York State Department of Environmental Conservation- (NYSDEC-) selected remedy for the Oneonta former manufactured gas plant (MGP) site. The former MGP site is located on James Georgeson Avenue (in Neahwa Park) in the southern portion of the City of Oneonta, Otsego County, New York (Figure 1).

The NYSDEC-selected soil, sediment, and groundwater remedies for the site are presented in the Record of Decision (NYSDEC, 2005) (ROD). The soil remedy for the site consisted of excavation and off-site disposal of soil within the former MGP footprint that contained MGP-tar or elevated concentrations of polycyclic aromatic hydrocarbons (PAHs), backfilling the excavation with approved fill materials, and finishing the ground surface with macadam, crushed stone, and/or asphalt. The sediment remedy consisted of excavation, off-site disposal, and backfilling activities of portions of Mill Race Creek. The soil and sediment remedies for the site were completed by NYSEG in 2007.

The groundwater remedy consisted of two components:

- Passive removal of drainable MGP-related non-aqueous phase liquid (NAPL), when identified
- In-situ treatment of groundwater

NYSEG completed construction of a permeable wall associated with the groundwater remedy in December 2007, followed by start-up of groundwater treatment in May 2008. Based on review of the initial five-year treatment system performance and effectiveness monitoring data (2008 through 2013), the NYSDEC approved suspension of the oxygen-enhancement of groundwater for a five-year period while collecting monitoring data to document the resulting effect on groundwater quality at the dissolved plume fringe. Application of oxygen-releasing material was suspended during the November 2013 (Q22) site visit. This Annual PRR represents the fifth annual report since suspension of oxygen enhancement of groundwater and includes recommendations for the next five years of site monitoring.

Effectiveness monitoring, NAPL gauging, and O&M activities for the reporting period (Q40 and Q42) were conducted in accordance with the SMP. Based on data collected during the reporting period, along with data collected over the previous five-year period, the following conclusions are made:

- The requirements for effectiveness monitoring were met.
- NAPL was not detected in any of the five site NAPL recovery wells (NRWs), and the sorbent socks
 installed in AW-12 have been successful at removing the quantity of NAPL entering the well.
- Total BTEX and PAH concentrations in groundwater show an overall decreasing trend since the suspension of oxygen enhancement.
- Neither BTEX or PAHs were detected in groundwater from "internal" well MW-8806S (located approximately 50 feet downgradient from the former treatment area) since application of the oxygenreleasing socks was suspended. Based on the location of this well, this provides strong evidence that

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suspension of oxygen enhancement has had no negative effect on downgradient dissolved concentrations.

Recommendations based on operation and monitoring of the site remedy during the reporting period, and over the previous five-year period, the following recommendations include:

- Continue to conduct effectiveness monitoring for the next 5-year period; however, eliminate three
 monitoring wells (MW-9110S, MW-8807S, and MW-8808S) from the semi-annual and annual
 sampling requirements; BTEX and PAHs have not been detected in any of these wells for an
 extended period of time.
- Continue to install a sorbent sock to passively remove accumulated DNAPL in AW-12. Replacement of the sorbent sock should continue to be conducted on a semi-annual basis.
- Continue semi-annual and annual gauging of MWs, PMWs, NRWs, AWs, staff gauges, and piezometers.
- Continue to conduct operation and maintenance, including site inspections and site maintenance for the next 5-year period.
- As previously approved by the NYSDEC, permanently decommission NRW-03, NRW-04 and NRW-05. No evidence of NAPL or sheens have been detected at these wells since installation.
- Continue to prepare annual Periodic Review Reports as described in the NYSDEC's December 19, 2016 letter correspondence to NYSEG.
- Based on NYSDEC approval of the above recommendations to modify the effectiveness monitoring requirements, NYSEG will prepare a SMP Addendum Letter to be included as an attachment to the existing SMP. The SMP Addendum Letter will describe the NYSDEC-approved modifications, including a revised monitoring schedule and revised sampling and analysis summary for the next 5year monitoring period.

1 INTRODUCTION

This Annual Periodic Review Report (Annual PRR) summarizes the monitoring results obtained and operation and maintenance (O&M) activities conducted during the reporting period for the New York State Department of Environmental Conservation- (NYSDEC-) selected remedy for the Oneonta former manufactured gas plant (MGP) site. The former MGP site is located on James Georgeson Avenue (in Neahwa Park) in the southern portion of the City of Oneonta, Otsego County, New York (**Figure 1**).

As directed in the NYSDEC's December 19, 2016 letter correspondence to NYSEG, this Annual PRR covers the time period from December 20, 2017 through December 19, 2018 and includes monitoring data collected from the May 2018 (Q40) and November 2018 (Q42) site visits.

1.1 Background

The NYSDEC-selected soil, sediment, and groundwater remedies for the site are presented in the Record of Decision (NYSDEC, 2005) (ROD). The soil remedy for the site consisted of excavation and off-site disposal of soil within the former MGP footprint that contained MGP-tar or elevated concentrations of polycyclic aromatic hydrocarbons (PAHs), backfilling the excavation with approved fill materials, and finishing the ground surface with macadam, crushed stone, and/or asphalt. The sediment remedy also consisted of excavation, off-site disposal, and backfilling activities. The soil and sediment remedies for the site were completed by NYSEG in 2007.

The groundwater remedy consisted of two components:

- Passive removal of drainable MGP-related non-aqueous phase liquid (NAPL), when identified
- In-situ groundwater treatment

NYSEG completed construction of a permeable wall associated with the groundwater remedy in December 2007 during backfilling operations associated with the soil excavation remedy. Application well (AW), performance monitoring well (PMW), and NAPL recovery well (NRW) installation was completed in March 2008, followed by start-up of groundwater treatment in May 2008. Construction details of the site wells and permeable wall are contained in the *Site Management Plan* (Arcadis, 2014) (SMP). The locations of the permeable wall and associated well network are presented on **Figure 2**.

In-situ treatment of groundwater during the first five years of system operation (i.e., 2008 through 2013) consisted of increasing the oxygen content of groundwater to enhance natural biodegradation of dissolved benzene, toluene, ethyl benzene, and xylenes (BTEX) through the application of oxygen releasing compounds (i.e., Adventus ECH-O oxygen-releasing socks). Based on review of the initial five-year treatment system performance and effectiveness monitoring data, the NYSDEC approved suspension of the oxygen enhancement of groundwater for a five-year period while collecting monitoring data to document the resulting effect on groundwater quality at the dissolved plume fringe. Application of oxygen-releasing material was suspended during the November 2013 (Q22) site visit. This Annual PRR represents the fifth annual report since suspension of oxygen enhancement of groundwater.

The SMP for the second five-years of the site remedy (December 2013 through December 2018) presents activities performed associated with:

Effectiveness monitoring to document site-wide groundwater quality.

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- Monitoring for the presence of NAPL.
- O&M of the groundwater well network.
- Notification and procedural requirements for conducting soil disturbance activities within areas potentially containing MGP-impacted material.
- Vapor intrusion considerations for future development of structures within areas potentially containing residual MGP-impacts.
- Minimum health and safety requirements for contractors performing work within areas potentially containing residual MGP impacts.
- Reporting requirements associated with the site activities.

1.2 Objectives

As presented in the SMP, the objectives of the groundwater remedy for the second five-year monitoring period (December 2013 through December 2018) were to:

- Passively remove drainable NAPL, if identified.
- Monitor groundwater quality to document dissolved BTEX and PAH concentrations at the dissolved plume fringe.

Effectiveness monitoring, NAPL gauging, and O&M activities for the current reporting period (Q40 and Q42) were conducted in accordance with the SMP and are presented in this Annual PRR. A summary of the monitoring, gauging, and O&M tasks completed during the monitoring period, along with the associated dates the tasks were conducted, is presented in **Table** 1.

The objectives of this Annual PRR are to:

- Present the site-wide data collected during the monitoring period.
- Present recommendations for monitoring requirements for the next five year period based on data collected during the past five year period (i.e., from December 2013 [Q22] through December 2018 [Q42].

For comparison purposes and to support the conclusions and recommendations presented in Section 5, data collected during the previous site visits are included in tables, where appropriate.

2 EFFECTIVENESS MONITORING

Effectiveness monitoring was conducted during two site visits during the reporting period:

- May 14 17, 2018 (Q40, Annual site visit).
- November 12 14, 2018 (Q42, Semi-annual site visit).

As described in the SMP, effectiveness monitoring during the reporting period consisted of:

- Semi-annual measurement of groundwater and surface-water levels in 14 PMWs, 14 MWs, 4 staff gauges, and 4 piezometers.
- Semi-annual gauging of 5 NRWs and AW-12 for the presence of NAPL. Note that the previous Annual PRR dated January 2018 recommended, and the NYSDEC approved, decommissioning of 3 of the 5 NRWs (NRW-03, NRW-04, and NRW-05). These wells are tentatively scheduled for decommissioning during the Spring 2019 (Q44) site visit.
- Semi-annual sampling for BTEX and PAHs in groundwater from 13 monitoring wells across the site.

Objectives of the groundwater effectiveness monitoring are to:

- Assess groundwater movement patterns within the study area using water-level data.
- Document concentrations of dissolved BTEX and PAHs at the plume fringe.
- Document dissolved BTEX and PAH concentration trends.

As presented in the ROD, BTEX data is used to evaluate the effectiveness of the groundwater remedy; however, for completeness, PAH data is also collected and evaluated.

The results from the effectiveness monitoring are presented below.

2.1 Groundwater Movement

To document the depth to groundwater and flow directions, water-level data were collected semi-annually (i.e., Q40 and Q42) from the following locations:

- 14 performance monitoring wells (PMW-01 through PMW-14).
- 14 site monitoring wells (MW-8604S, MW-8806S, MW-8807S, MW-8808S, MW-9109S, MW-9110S, MW-9111S, MW-9112S, MW-9114S, MW-9502S, MW-0201, MW-0203, PTMW-0202, and MW-0301).
- Four staff gauges (SG-105, SG-107, SG-110, and SG-111)
- Four piezometers (PZ-0801, PZ-0802, PZ-0803, and PZ-105).

Table 2 presents water elevation data collected during this reporting period, along with previous elevation data collected.

Figure 3 presents the water-table elevations and flow direction developed from the May 2018 (Q40 annual) gauging event; **Figure 4** presents the water-table elevations and flow direction developed from the November 2018 (Q42 semi-annual) gauging event. As shown on the figures, the general groundwater

flow direction at the site was to the south and southwest during each gauging event. When compared to water-table maps prepared for the nine previous years, no significant changes to site-wide groundwater flow directions have occurred.

2.2 NAPL Monitoring

NAPL monitoring was conducted during both the Q40 and Q42 site visits and consisted of gauging the five NAPL recovery wells (NRW-01, NRW-02, NRW-03, NRW-04, and NRW-05) and change-out of the sorbent sock in AW-12. The objectives of this task were to identify whether NAPL had accumulated within a well, and to remove the NAPL if present and recoverable. Locations of NAPL recovery wells NRW-01 through NRW-04 and AW-12 are shown on **Figure 2**. NAPL recovery well NRW-05 is shown **on Figure 3** and **Figure 4**.

NAPL gauging data are also included in **Table 2.** NAPL was not visually observed during gauging in any of the five NRWs during the reporting period. To date (i.e., since first gauged in April 2008), NAPL has not been visually observed in any of the five NRWs).

As recommended in the sixth *Annual Report (Q21-Q24)*, a NAPL sorbent sock was installed in AW-12 during the Q26 site visit to passively remove DNAPL. The sorbent sock is removed, and a new sock reinstalled during each semi-annual site visit. Similar to previous results, during the Q40 (spring) site visit the sorbent material in the sorbent sock was completely saturated with NAPL. During the Q42 site visit (fall) the sorbent material in the sorbent sock was approximately 80% saturated with NAPL. The recovered sorbent socks were properly containerized and staged in the secure on-site shed for disposal by NYSEG. Photographs of the spent sorbent socks from each site visit during the reporting period are included as **Appendix A**.

2.3 Groundwater Quality

As stated above, in addition to assessing groundwater movement patterns, two additional objectives of groundwater effectiveness monitoring for the second five-year period of monitoring were to:

- document the concentrations of dissolved BTEX and PAHs at the plume fringe.
- document trends in BTEX and PAH concentrations since suspension of groundwater treatment.

An ongoing program of groundwater monitoring has been in place at the site since 1986 (i.e., prior to implementing the site remedy). As presented in the *Supplemental Remedial Investigation Report* (BBL, 2004), based on long-term monitoring data, the extent of impacted groundwater at that time appeared to be stable due to a variety of naturally occurring processes, including dilution, hydrophobic sorption, and in-situ biodegradation.

During both the Q40 and Q42 sampling events, groundwater collected from the 13 monitoring wells identified in the SMP were submitted to TestAmerica Laboratories located in Amherst, New York for analysis of:

- BTEX by United States Environmental Protection Agency (USEPA) SW-846 Method 8260
- PAHs by USEPA SW-846 Method 8270.

Analytical results are summarized in **Table 3**. For comparison purposes, baseline groundwater quality results collected in April 2008 and data collected during the previous nine years of groundwater treatment (i.e., Q1 through Q38). In addition, historical data from 2003 are also included in the table.

Laboratory data packages from both the Q40 and Q4 2 sampling events were reviewed by an individual approved to validate data in New York State, and *Data Usability Summary Reports* (DUSRs) were prepared. Data review indicated that overall laboratory performance was acceptable, and that the overall data quality was within guidelines specified in the respective method for both events. A compact disc containing copies of the DUSRs is included as **Appendix B**.

Laboratory results for BTEX and PAHs are summarized below.

2.3.1 Dissolved BTEX

Laboratory data for dissolved BTEX are presented in **Table 3**. For comparison purposes, dissolved BTEX data from the baseline sampling event through the most recent event are presented on **Figure 5**.

As shown on **Figure 5**, 12 of the wells currently sampled are located around the perimeter of the study area (for discussion purposes MW-8806S is not considered a perimeter well). For the two sampling events included in this reporting period:

- Q40 (Spring): BTEX was not detected in groundwater collected from 7 of the 12 perimeter wells (BTEX was detected at MW-0201, MW-8604S, MW-9111S, MW-9114S, and PTMW-0202).
- Q42 (Fall): BTEX was not detected in groundwater from 9 of the 12 perimeter wells (BTEX was detected at MW-0201, MW-8604S, and PTMW-0202).

These results are consistent with previous Spring and Fall sampling events. Graphs of dissolved concentrations of BTEX over time are presented in **Appendix C** (**Graphs 1** through **3**). For wells with detectable concentrations of BTEX, data from all sampling events (i.e., Spring and Fall events) from May 2003 through November 2018 (Q42) are presented on **Graph 1**; this graph shows the seasonal fluctuation of BTEX concentrations over time. BTEX concentrations from Spring (May) sampling events are presented on **Graph 2**; and data from Fall (November) sampling events are presented on **Graph 3**. Note that prior to implementing the groundwater remedy, wells were not sampled in the Fall; therefore, fewer data points exist. Dates of the source material excavation from the western plant area (WPA) and groundwater oxygen enhancement initiation/suspension are also shown on the graphs for reference.

Further discussions of the results are presented below.

Q40 (Spring 2018):

At the five perimeter wells where BTEX analytes were detected during the Q40 sampling event (MW-0201, MW-8604S, MW-9111S, MW-9114S, and PTMW-0202):

- Benzene was the analyte detected at the highest relative concentrations and at the highest frequency
- At MW-0201 the concentration of total BTEX decreased compared to the Q36 (Spring 2017) sampling event. In addition, as shown on **Graph 2**, (**Appendix C**), the concentrations of BTEX have decreased from 1,241 µg/L to 154 µg/L subsequent to suspension of active treatment of groundwater in 2013.

- At MW-8604S benzene was the only analyte detected, which is consistent with previous Spring sampling events. As also shown on **Graph 2**, (**Appendix C**), concentrations of total BTEX have decreased slightly (however, remain fairly consistent) since the suspension of oxygen enhancement of groundwater in 2013.
- At MW-9111S benzene was the only analyte detected and was reported at a concentration of 0.68
 µg/L (below its NYS drinking water standard). BTEX concentrations are generally not-detectable;
 however, occasional detections of benzene have been reported.
- At MW-9114S toluene was the only analyte detected. Toluene was reported at a concentration of 0.55 μg/L, which has decreased since the Q38 (May 2017) sampling event and is below its NYSDEC drinking water standard.
- At PTMW-0202 concentrations of BTEX have continued to fluctuate since 2012, prior to suspension
 of oxygen enhancement of groundwater; however, reported BTEX concentrations for the Q40
 sampling event were higher than previous results. PTMW-0202 is located between the former MGP
 and MW-9111S (another perimeter well); as presented above, MW-9111S contained only benzene at
 a concentration below NYS drinking water standards.

During the Q40 sampling event, BTEX was not detected from "internal" well MW-8806S (located approximately 50 feet downgradient from the former treatment area); this result is consistent with historical Spring sampling events

Q42 (Fall 2018):

At the three perimeter wells where BTEX analytes were detected during the Q42 (Fall 2018) sampling event (MW-0201, MW-8604S, and PTMW-0202):

- Benzene was the analyte detected in the highest relative concentration at each of the three wells (benzene was the only analyte detected at two of the three wells).
- At MW-0201, while the concentration of total BTEX reported for the Fall sampling events has
 fluctuated since suspension of oxygen enhancement of groundwater in 2013; however, the overall
 trend indicates decreasing concentrations (from 1,038 μg/L to 550 μg/L).
- At MW-8604S, benzene was the only analyte detected (consistent with previous Spring sampling events); reported concentrations have remained constant ranging between approximately 2 to 3 μg/L since suspension of oxygen enhancement of groundwater.
- At PTMW-0202 reported concentrations of BTEX (primarily benzene) have continued to fluctuate since 2012, prior to suspension of oxygen enhancement of groundwater. PTMW-0202 is located between the former MGP and MW-9111S (another perimeter well) that did not have detectable concentrations of BTEX during the Q42 sampling event.

During the Q42 sampling event at "internal" well MW-8806S total BTEX was not present at detectable concentrations.

2.3.2 Dissolved PAHs

The laboratory data for dissolved PAHs are also presented in **Table 3**. For comparison purposes, dissolved PAH data from the baseline sampling event through the most recent event are presented on **Figure 6**.

As shown on **Figure 6**, 12 of the monitoring wells that are currently sampled are located at the dissolved plume perimeter (again, for discussion purposes MW-8806S is not considered a perimeter well). For the two sampling events included in this reporting period:

- Q40 (Spring): PAHs were not detected in groundwater from 9 of the 12 perimeter wells (PAHs were
 detected at MW-8604, MW-9111S, and PTMW-0202).
- Q42 (Fall): PAHs were not detected in groundwater from 8 of the 12 perimeter wells (PAHs were detected at MW-0201, MW-8604, MW-9111S, and PTMW-0202)

These results are consistent with results from previous sampling events. Graphs of dissolved concentrations of PAHs over time are presented in **Appendix C** (**Graphs 4** and **5**). PAH data collected from the Spring (i.e., April/May) sampling events from 2003 through 2018 are presented on **Graph 4**; data collected from the Fall (i.e., November) sampling events are presented on **Graph 5**. Note that prior to implementing the SMP, wells were not sampled in the Fall; therefore, fewer data points exist. Dates of the source material excavation from the WPA and the oxygen treatment initiation and suspension are also shown on the graphs.

Further discussions of the results are presented below.

Q40 (Spring 2018):

At the 3 perimeter wells where PAH analytes were detected during the Q40 sampling event during the Q40 sampling event (MW-8604S, MW-9111S and PTMW-0202):

- At MW-8604S, the total PAH results (6.97 μg/L) are consistent with results from the past five years subsequent to suspension of active treatment of groundwater, and have decreased since removal if source material in 2007. None of the PAH analytes present during the Q40 sampling event exceeded their respective drinking water guidance value.
- At MW-9111S, total PAH results (2.5 μg/L) are consistent with historical results, which have ranged between 2.5 μg/L to 4.0 μg/L for the past five years subsequent to suspension of active treatment of groundwater. None of the PAH analytes present during the Q40 sampling event exceeded their respective drinking water guidance value.
- At PTMW-0202, total PAH results (86.2 μg/L) have increased slightly during each of the last four Spring sampling events; however, have generally ranged between 50.0 μg/L to 86.0 μg/L since oxygen enhancement was suspended. Only acenaphthene exceeded its guidance value at PTMW-0201. As stated above, PTMW-0202 is located between the former MGP and MW-9111S (where no PAH analytes exceed groundwater guidance values and concentrations of PAHs are not increasing).

No PAH analytes were detected in groundwater from "internal" well MW-8806S located downgradient from the former treatment area during the Q40 sampling event. This result is consistent with Spring sampling results since 2008.

Q42 (Fall 2018):

Similar to previous Fall sampling events, PAHs were detected in groundwater at 4 of the 12 perimeter wells (MW-0201, MW-8604S, MW-9111S, and PTMW-0202) during the Q42 sampling event; PAHs exceeded a groundwater guidance value in two of those wells:

- At MW-0201 naphthalene was the only PAH analyte detected; naphthalene was reported at a concentration above its guidance value
- At PTMW-0202 naphthalene and acenaphthene were reported above their respective groundwater guidance values

At the four perimeter wells where PAH analytes were detected during the Q42 sampling event:

- At MW-0201, concentrations of naphthalene (and, therefore; total PAHs) have fluctuated within a
 consistent range between 280 μg/L to 560 μg/L since November 2013 (Q22) when oxygen
 enhancement of groundwater was suspended; however, have decreased over the last two sampling
 events.
- At 8604S, no reported PAH analyte exceeded a guidance value; concentrations of total PAHs have decreased slightly since November 2013 (Q22) when oxygen enhancement of groundwater was suspended.
- At MW-9111S, only acenaphthene was present and at a reported concentration below its guidance value; concentrations of acenaphthene (as well as total PAHs) have been consistent since oxygen enhancement of groundwater was suspended.
- At PTMW-0202, the concentrations of naphthalene and acenaphthene (the analytes detected most frequently and at the highest relative concentrations) have continued to fluctuate since oxygen enhancement of groundwater was suspended; however, reported concentrations were noticeably lower during the Q42 sampling event than the previous Fall sampling event.

During the Q42 groundwater sampling event from "internal" well MW-8806S, no PAH analytes were present above their reporting limits. The concentrations of PAHs have significantly decreased since oxygen enhancement of groundwater was suspended.

When the results from the Spring and Fall sampling events are compared, concentrations of PAHs were generally lower during the Spring sampling events compared to the Fall sampling events.

3 OPERATION AND MAINTENANCE

The City of Oneonta is responsible for overall maintenance of Neahwa Park and Damaschke Field; however, NYSEG is responsible for maintaining any aspect of the site that is associated with remediation activities for the former MGP facility.

In addition to routine site maintenance, operation and maintenance activities during the reporting period included annual inspection of site wells and a comprehensive site inspection of all remedial components and site conditions.

A summary of these activities is presented below.

3.1 Well Network

Visual inspections of all site wells (PMWs, NRWs, MWs, AWs, piezometers and staff gauges) were visually inspected during the annual (Q40) visit to confirm that the integrity of the protective road boxes and surrounding concrete collars were maintained, locks were existing, and to identify required repairs. The PMWs, NRWs, and MWs were also inspected during the semi-annual (Q42) site visit.

Depth to bottom measurements and accumulated thickness of sediments (e.g., silts, sands) for each well were collected and are presented in **Table 2**. Depth to bottom measurements were compared to the installed depth as reported on each well's construction logs to determine if re-development is needed. Note that depth to bottom measurements for the AWs are only collected during the annual site visit (Q40). A summary of the results is presented in below.

3.1.1 Monitoring Wells

Based on the Q42 gauging event (i.e., most recent), only 3 of the 14 wells (MW-9111S, MW-9109S, and MW-8606S) contained accumulated sediments (0.18 feet, 0.11 feet, and 0.01 feet, respectively), which is approximately 2.0%, 2.0%, and less than 1.0% of their screen lengths occluded by sediments based on the installed depth and length of screened interval.

3.1.2 Application Wells

As stated above, during the November 2013 (Q22) site visit the oxygen-releasing socks and their stainless-steel canisters were removed. Although the AWs are not currently being used for the application of oxygen-releasing material, depth to bottom measurements were recorded during the Q40 (annual) visit and compared to the baseline measurements to evaluate the potential future need for re-development due to siltation.

Based on the Q40 gauging results, the following were observed:

- 12 of the 16 AWs had some amount of sediment accumulation, ranging from 0.02 feet (AW-05) to 2.41 feet (AW-14)
- Three AWs had greater than 10% of their screen length occluded with sediments:
 - AW-10 (16% of the 7-foot length of screen occluded)

- AW-11 (11% of the 6-foot length of screen occluded)
- AW-14 (60% of the 4-foot length of screen occluded)

These quantities of sedimentation are consistent with historical quantities previously reported; therefore, do not appear to be significantly increasing.

AW-14 has only 4 feet of screen length and historically has had greater than 2 feet of sediment subsequent to development. Past re-development efforts have been unsuccessful at reducing the quantity of sediments in the well.

3.1.3 Performance Monitoring Wells

Similar to the AWs, although these wells are not currently being used, depth to bottom measurements were recorded during the Q42 (most recent) visit and compared to the baseline measurements to evaluate the potential future need for re-development due to siltation.

Based on the Q42 gauging results, the following were observed:

- 8 of the 14 PMWs contained some amount of accumulated sediments, ranging from 0.01 feet (PMW-10 and PMW-11) to 0.4 feet (PMW-07)
- Of the 8 PMWs containing measurable amounts of sediments, only PMW-07 (0.40 feet) had 10% or more of its screen length occluded.

These quantities of sedimentation are consistent with historical quantities previously reported; therefore, do not appear to be increasing significantly.

3.1.4 Piezometers

A comparison of the depth to bottom measurements collected during the Q42 (i.e., most recent) gauging event to the construction details of the four piezometers associated with the site (PZ-0801, PZ-0802, PZ-0803, and PZ-105) is also presented in **Table 2**. The gauging data indicated that accumulated sediment ranged from 0.07 feet (PZ-0803) to 1.14 feet (PZ-0801) in thickness (0.4 to 10.5% of screen length occluded). The quantity of accumulated sediments at PZ-0801 is consistent with historical results dating back to May 2015.

Piezometer PZ-105 (located near the northwest edge of Neahwa Pond) is occasionally dry; historically, when present, water has typically been recorded from 0.1 to 0.8 feet of since 2008. PZ-105 contained 1.0 and 0.6 feet of water during the Q40 and Q42 site visits, respectively. Approximately 0.38 feet of sediment was measured in PZ-105. Historically, this piezometer exhibits siltation of approximately 0.36 - 0.42 feet (even when dry). Therefore, it is likely that either the surveyed depth to bottom is inaccurate or there are consistent and unchanging siltation/small stones in the bottom.

3.1.5 NAPL Recovery Wells

A comparison of the depth to bottom measurements collected during the Q42 gauging event for each of the five NRWs to their respective well construction logs was conducted to determine accumulation of materials within the each well.

As shown on **Table 2**, four of the five NRWs did not contain a significant amount of accumulated material in the sumps; NRW-05 contained 0.06 feet of material in the sump. Because each of the NRWs was constructed with a 2-foot-long collection sump, and no significant accumulation of sediments existed, none of their screen lengths were occluded.

As stated above, decommissioning of three NRWs (NRW-03, NRW-04, and NRW-05) is tentatively scheduled to occur in Spring 2019.

3.1.6 Staff Gauges

All staff gauges were present and in good condition during the reporting period. Gauging results are included in **Table 2**.

3.2 Annual Site Inspection

An annual site inspection was conducted May 14, 2018. During the annual inspection, areas within the former MGP footprint were inspected for sparse vegetation, erosion, settling, damaged asphalt (including, but not limited to, cracks and depressions) or cover material, and obvious obstructions within drainage features (e.g., catch basins). A photographic log documenting the site conditions at the time of the annual inspection is included as **Appendix D**. The location where each photograph was taken, and the direction that the photographer was facing, is shown on **Figure 7**. The annual site inspection indicated that overall the site cover is in good condition, and:

- Maintenance to the soil cover across the site was not required.
- Maintenance to the asphalt surface above the groundwater treatment system was not required.
- Drainage features were clear of obstructions.

In addition, photographic documentation of the condition of each well associated with the site, including protective covers, locking devices, and overall integrity of the wells is provided as **Appendix E**.

Inspections of the site wells and staff gauges were also conducted during the annual site visit. No significant deficiencies were identified during this reporting period. No repairs or maintenance actions are required; however, the protective road boxes for NAPL recovery wells NRW-03 and NRW-04 have settled slightly. NRW-03 and NRW-04 are located in the paved parking area adjacent to the baseball stadium, and have been approved by the NYSEC for decommissioning; the wells are tentatively scheduled for decommissioning in Spring 2019.

4 DISTURBANCE ACTIVITIES IN POTENTIALLY IMPACTED AREAS

NYSEG is not aware of any subsurface intrusive activities that were conducted in potentially impacted areas during the reporting period.

5 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations based on the fifth year of monitoring subsequent to suspension of oxygen-enhancement of groundwater are presented below.

5.1 Conclusions

A summary of pertinent conclusions is presented below.

5.1.1 Effectiveness Monitoring

- Requirements for effectiveness monitoring were met during the reporting period.
- Groundwater Movement
 - General groundwater flow direction continues to be to the south and southwest; the groundwater movement pattern is consistent with the previous nine years of monitoring.
- NAPL Monitoring
 - NAPL was not detected in any of the five NRWs during the reporting period; NAPL has not been detected in any of the NRWs during the ten years of monitoring.
 - The sorbent sock(s) installed in AW-12 have been successful at removing the quantity of NAPL entering the well.
- Groundwater Quality

Total BTEX concentrations in groundwater shows an overall decreasing trend since the suspension of oxygen enhancement.

During Spring sampling events, BTEX and/or PAHs have been detected in 4 to 5 downgradient monitoring wells over the past 10 years. Laboratory data supports the conclusion that suspension of oxygen enhancement of groundwater has not had a negative effect on the concentration of either BTEX or PAHs in downgradient groundwater, and that natural attenuation is occurring:

- At MW-0201, since 2008 BTEX concentrations in groundwater have declined from 2,149 μg/L to 154 μg/L; since suspension of oxygen enhancement of groundwater in November 2013 BTEX concentrations have continued to drop from 1,241 μg/L to 154 μg/L. While reported PAH concentrations have fluctuated, since suspension of oxygen enhancement concentrations have decreased from 230 μg/L to below detectable limits.
- At MW-8604S, since 2003 BTEX concentrations in groundwater have declined from 626 μg/L to 1.1 μg/L; since suspension of oxygen enhancement of groundwater, while low, concentrations have continued to drop from 3.9 μg/L to 1.1 μg/L and total PAH concentrations have remained steady at approximately 7 μg/L with no exceedance of guidance values.
- At MW-9111S, since 2003 concentrations of BTEX have been reported at or near below detection limits, and results have remained similar since suspension of the active groundwater remedy.

Similarly, total PAH concentrations have remained between 4 μ g/L to 6 μ g/L with no exceedances of guidance values.

- At MW-9114S, with one exception, concentrations of BTEX have remained below groundwater standards (toluene exceeded its groundwater standard once). Total PAHs have not been detected in groundwater since the suspension of oxygen enhancement.
- At PTMW-0202, reported concentrations of total BTEX have fluctuated between 43 μg/L to 97 μg/L since suspension of groundwater treatment; however, total BTEX concentrations were at 126 μg/L prior to suspension. Concentrations of total PAHs have been increasing since May 2013, prior to suspension of groundwater treatment.

Similarly, during Fall sampling events, BTEX and/or PAHs have been detected in 4 to 5 of the downgradient monitoring wells over the past 10 years. Laboratory data also support the conclusion that suspension of oxygen enhancement of groundwater has not had a negative effect on the concentration of either BTEX or PAHs in downgradient groundwater, and that natural attenuation is occurring:

- At MW-0201, since 2008 BTEX concentrations in groundwater have declined from 2,688 μg/L to 550 μg/L; since suspension of oxygen enhancement of groundwater in November 2013 BTEX concentration have decreased from1,038 μg/L to 550 μg/L.
- At MW-8604S, BTEX concentrations in groundwater have declined from 79 μg/L to 2.4 μg/L since 2008 (earliest Fall sampling data) and PAHs decreased from 92 μg/L to 10.6 μg/L. Since suspension of oxygen enhancement of groundwater, concentrations of BTEX have remained constant and total PAH concentrations have decreased slightly.
- At MW-9111S, since 2003 BTEX has generally been reported at below detection limits with the
 occasional presence of benzene (Q42 results did not contain any BTEX analyte above detection
 limits). Similarly, total PAH concentrations have remained between 4 μg/L to 6 μg/L with no
 exceedances of guidance values.
- At MW-9114S, with one exception, concentrations of BTEX have remained below groundwater standards (toluene exceeded its groundwater standard once). Total PAHs have not been detected in groundwater since the suspension of oxygen enhancement.
- At PTMW-0202, the concentrations of both total BTEX and total PAHs have continued to fluctuate since 2012, prior to suspension of oxygen enhancement of groundwater.

BTEX were not detected from "internal" well MW-8806S (located approximately 50 feet downgradient from the former treatment area) since application of the oxygen-releasing socks was suspended. Based on the location of this well, this provides strong evidence that suspension of oxygen enhancement has had no negative effects on downgradient dissolved concentrations.

Seasonal changes continue to have an effect on dissolved BTEX and PAH concentrations. Where present, dissolved BTEX and PAH concentrations were generally higher during the Fall sampling events compared to Spring sampling events. Any changes observed were likely the result of seasonal precipitation and runoff volume fluctuations, completion of the soil remedy (i.e., removal of source material), along with natural attenuation and seasonal dilution, and not from the suspension of oxygen within the treatment system.

5.1.2 Operation and Maintenance

- Requirements for effectiveness monitoring were met during the reporting period.
- Well Network
 - Visual inspections and gauging of the site wells were conducted during semi-annual and annual site visits; no required repairs were identified.
 - None of the MWs contained significant amounts of accumulated sediments.
 - Three (3) of the 16 AWs had greater than 10% of their screen lengths occluded with sediments; however, the amount of sediments are consistent with previous gauging events and the AWs are not currently being used.
 - None of the 14 PMWs contained significant amounts of accumulated sediments, and the PMWs are not currently being used.
 - Accumulated sediments in the four piezometers are consistent with historical measurements;
 sediment accumulation within the piezometers does not appear to be increasing.
 - None of the NRWs contained significant amounts of accumulated materials
 - No sediment removal or redevelopment of site wells is required at this time.
- Annual Site Inspection
 - The soil cover and asphalt surface above the groundwater treatment system were in good condition; no repairs were required.
 - Drainage features were clear of obstructions
 - No repairs to MWs, NRWs, AWs, or PMWs were required.

5.2 Recommendations

Recommendations based on operation and monitoring of the NYSDEC-selected remedy during the reporting period are presented below.

5.2.1 Effectiveness Monitoring

- Continue to conduct effectiveness monitoring for the next 5-year period; however, eliminate the following three monitoring wells from the semi-annual and annual sampling requirements:
 - MW-9110S: sampling results from groundwater collected from this well have been "non-detect" for both BTEX and PAHs since 2009.
 - MW-8807S: sampling results from groundwater collected from this well have been "non-detect" for BTEX since 2011 and for PAHs since 2008.
 - MW-8808S: sampling results from groundwater collected from this well have been "non-detect" for BTEX since 2009 and for PAHs since 2008.

These wells will still be gauged on a semi-annual basis to evaluate groundwater flow patterns.

- Continue to install a sorbent sock to passively remove accumulated DNAPL in AW-12. Replacement
 of the sorbent sock should continue to be conducted on a semi-annual basis.
- Continue semi-annual and annual gauging of MWs, PMWs, NRWs, AWs, staff gauges, and piezometers.

5.2.2 Operation and Maintenance

- Continue to conduct operation and maintenance, including site inspections and site maintenance for the next 5-year period, as described in the SMP.
- As previously approved by the NYSDEC, permanently decommission NRW-03, NRW-04 and NRW-05. No evidence of NAPL or sheens have been detected at these wells since installation. in addition, NRW-05 is located east of the parking area in a grassed area with public access. This well also no longer provides useful information and should also be decommissioned so it no longer needs to be maintained.

5.2.3 Reporting

- Continue to prepare annual Periodic Review Reports as described in the NYSDEC's December 19, 2016 letter correspondence to NYSEG.
- Based on NYSDEC approval of the above recommendations to modify the effectiveness monitoring requirements and decommission NRW-05, NYSEG will prepare a SMP Addendum Letter to be included as an attachment to the existing SMP. The SMP Addendum Letter will describe the NYSSDEC-approved modifications, including a revised monitoring schedule and revised sampling and analysis summary for the next 5-year monitoring period.

6 CERTIFICATION STATEMENT

A statement from NYSEG confirming that site controls were in place and effective and no changes occurred during the reporting period that would impair the ability of the controls to protect public health and the environment is included as **Appendix F**. Additionally, included in **Appendix F**, is the completed NYSDEC Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form.

7 REFERENCES

- Arcadis. 2018. Annual Project Report (Q34 through Q38). Prepared for New York State Electric & Gas Corporation, Oneonta Former MGP Site, Oneonta New York (January 2018)
- Arcadis. 2014. *Site Management Plan.* Prepared for New York State Electric & Gas Corporation, Oneonta Former MGP Site, Oneonta, New York (February 2014).
- BBL. 2004. Supplemental Remedial Investigation Report, Prepared for New York State Electric & Gas Corporation, Oneonta Former MGP Site, Oneonta, New York (May 2004).
- New York State Department of Environmental Conservation. 2005. *Record of Decision*, NYSEG Oneonta MGP Site, City of Oneonta, Otsego County, New York. Site Number 4-39-001. March 2005.
- New York State Department of Environmental Conservation. 2016. Site Management (SM) Periodic Review Report (PRR) Response Letter, NYSEG Oneonta MGP, Oneonta. December 19, 2016.

TABLES

Table 1 Monitoring, Operation and Maintenance Tasks Annual Periodic Review Report (Q39 through Q42)

Oneonta Former MGP Site, Oneonta, New York

		Act	ivities Comple	eted/Schedule	d
Event	Dates Completed/ Anticipated	Effectiveness Monitoring	NAPL Gauging	Site Inspection	&M Well Inspections
Q22 Monitoring (Semi-annual)	November 11-15, 2013	х	х	-	x
Q24 Monitoring (6 th Annual)	May 27-30, 2014	х	х	х	x
Q26 Monitoring (Semi-annual)	November 17-19, 2014	х	х		x
Q28 Monitoring (7 th Annual)	May 19-21, 2015	х	х	х	x
Q30 Monitoring (Semi-annual)	November 11-18, 2015	х	х		x
Q32 Monitoring (8 th Annual)	May 9-11, 2016	х	х	х	х
Q34 Monitoring (Semi-annual)	November 2016	х	х		х
Q36 Monitoring (9 th Annual)	May 2017	Х	Х	х	Х
Q38 Monitoring (Semi-annual)	November 2017	Х	Х		Х
Q40 Monitoring (Annual)	May 14-16, 2018	Х	Х	х	х
Q42 Monitoring (Semi-Annual)	November 12-14, 2018	Х	Х		х

Notes:

- Shaded area identifies monitoring that was completed during the reporting period
- Effectiveness Monitoring includes:
 - semi-annual gauging of 14 PMWs, 14 MWs, 4 SGs, and 4 PZs
 - semi-annual sampling of 13 MWs for BTEX and PAHs
- NAPL Gauging includes DTW & DTB in 5 NRWs and AW-12
- Operation and Maintenance includes:
 - Annual Site Inspections includes visual inspections of MWs, PMWs, NRWs, SGs, and AWs associated with the site
 - Semi-Annual: includes visual inspection and depth to bottom measurements of the 16 AWs and 14 PMWs

Well ID	Measuring Point	Actual Depth to	Screen	onta Former MGP Site	Depth to Water	Groundwater	Depth to	Depth to Bottom	Accumulated Thickness of	Percent Screen Occluded By
	Elevation	Bottom	Length		(feet TOC)	Elevation	(feet TOC)	(feet TOC)	Sediments (feet)	Sediments (%)
				April 21, 2008 May 6, 2008	5.56	1075.41	-	24.01	-0.09	0.00
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	7.47	1073.50	-	24.04	-0.12	0.00
				February 17, 2009 May 11, 2009	6.67	1074.30	-	24.01	-0.09	0.00
				August 5, 2009	6.04	1074.93	-	24.02	-0.10	0.00
				November 30, 2009	6.77	1074.20	-	24.02	-0.10	0.00
				February 24, 2010	7.22	1073.75	-	24.03	-0.11	0.00
				May 17, 2010 November 1, 2010	6.15 5.55	1074.82 1075.42	-	23.97 23.80	-0.05 0.12	0.00 0.63
				May 9, 2011	4.70	1076.07	-	23.80	-0.08	0.00
				November 7, 2011	6.08	1074.69	-	23.81	-0.09	0.00
MW-9502S	1080.77	23.72	19.0	May 29, 2012 November 26, 2012	6.09 7.23	1074.68 1073.54	-	23.82 23.88	-0.10 -0.16	0.00
				May 6, 2013	6.01	1074.76	-	23.77	-0.05	0.00
				November 12, 2013	7.22	1073.55	-	23.75	-0.03	0.00
				May 27, 2014	5.44	1075.33	-	23.76	-0.04	0.00
				November 17, 2014 May 19, 2015	7.35 7.01	1073.42 1073.76	-	23.75	-0.03 -0.02	0.00
				November 16, 2015	6.10	1074.67	-	23.78	-0.06	0.00
				May 9, 2016	6.68	1074.09	-	23.74	-0.02	0.00
				November 15, 2016	8.01	1072.76	-	23.75	-0.03	0.00
				May 16, 2017 November 6, 2017	5.54 7.65	1075.23 1073.12	-	23.75 23.75	-0.03 -0.03	0.00
				May 14, 2018	7.65 5.95	1073.12	-	23.75	-0.03	0.00
			<u></u>	November 12, 2018	5.79	1074.98	-	23.75	-0.03	0.00
				April 21, 2008	1.95	1073.21	-	28.82	0.76	5.60
				May 6, 2008 August 5, 2008	-	-	-	-	-	-
				November 10, 2008	3.57	1071.59	-	28.84	0.74	5.40
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	3.23	1071.93	-	28.80	0.78	5.80
				August 5, 2009 November 30, 2009	2.29 3.11	1072.87 1072.05	-	28.84 28.81	0.74	5.40 5.70
				February 24, 2010	3.57	1072.03	-	28.81	0.77	5.70
				May 17, 2010	2.64	1072.52	-	29.58	0.00	0.00
				November 1, 2010	1.93	1073.23	-	29.63	-0.05	0.00
				May 9, 2011 November 7, 2011	1.09 2.57	1074.07 1072.59	-	29.62 29.58	-0.04 0.00	0.00
MW-0203*	1075.16	29.58	10.0	May 29, 2012	2.85	1072.31	-	29.66	-0.08	0.00
				November 26, 2012	3.69	1071.47	-	29.62	-0.04	0.00
				May 6, 2013	2.68	1072.48	-	29.54	0.04	0.00
				November 12, 2013 May 27, 2014	3.82 2.11	1071.34 1073.05	-	29.57 29.63	0.01 -0.05	0.00
				November 17, 2014	3.90	1071.26	-	29.60	-0.02	0.00
				May 19, 2015	3.85	1071.31	-	29.59	-0.01	0.00
				November 16, 2015	2.58	1072.58	-	29.59	-0.01	0.00
				May 9, 2016 November 15, 2016	3.19 4.62	1071.97 1070.54	-	29.59 29.59	-0.01 -0.01	0.00
				May 16, 2017	2.02	1070.34	-	29.60	-0.02	0.00
				November 6, 2017	4.00	1071.16	-	29.59	-0.01	0.00
				May 14, 2018	2.59	1072.57	-	29.59	-0.01	0.00
				November 12, 2018 April 21, 2008	2.02 6.23	1073.14 1076.15	-	29.59 11.16	-0.01 -0.53	0.00
				May 6, 2008	-	-	-	-	-0.00	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	8.15	1074.23	-	11.16	-0.53	0.00
				February 17, 2009 May 11, 2009	7.38	1075.00	-	11.16	-0.53	0.00
				August 5, 2009	6.71	1075.67	-	11.16	-0.53	0.00
				November 30, 2009	7.51	1074.87	-	11.15	-0.52	0.00
				February 24, 2010 May 17, 2010	7.83 6.77	1074.55 1075.61	-	11.17 11.11	-0.54 -0.48	0.00
				November 1, 2010	6.38	1075.61	-	11.11	-0.53	0.00
				May 9, 2011	5.54	1076.84	-	11.16	-0.53	0.00
				November 7, 2011	7.10	1075.28	-	11.18	-0.55	0.00
MW-9114S	1082.38	10.63	5.5	May 29, 2012 November 26, 2012	7.08 8.21	1075.30 1074.17	-	11.18 11.17	-0.55 -0.54	0.00
				May 6, 2013	7.03	1074.17	-	11.17	-0.53	0.00
				November 12, 2013	8.09	1074.29	-	11.12	-0.49	0.00
				May 27, 2014	6.30	1076.08	-	11.15	-0.52	0.00
				November 17, 2014 May 19, 2015	8.20 7.89	1074.18 1074.49	-	11.15 11.11	-0.52 -0.48	0.00
				November 16, 2015	7.04	1074.49	-	11.11	-0.48	0.00
				May 9, 2016	7.60	1074.78	-	11.13	-0.50	0.00
				November 15, 2016	8.89	1073.49	-	11.12	-0.49	0.00
				May 16, 2017	6.40 8.40	1075.98	-	11.13	-0.50	0.00
					0.40	1073.98	-	11.12	-0.49	. 0.00
				November 6, 2017 May 14, 2018	6.85	1075.53	-	11.15	-0.52	0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	9.22	1073.80	-	19.48	-0.48	0.00
				May 6, 2008 August 5, 2008	-		-	-	-	-
				November 10, 2008	9.40	1073.62	-	19.49	-0.49	0.00
				February 17, 2009	- 0.10	1073.83	-	19.48	-0.48	0.00
				May 11, 2009 August 5, 2009	9.19 8.97	1073.83	-	19.46	-0.46	0.00
				November 30, 2009	9.20	1073.82	-	19.48	-0.48	0.00
				February 24, 2010	9.37	1073.65	-	19.47	-0.47	0.00
				May 17, 2010 November 1, 2010	8.98 8.89	1074.04 1074.13	-	19.44 19.48	-0.44 -0.48	0.00
				May 9, 2011	8.90	1074.12	-	19.51	-0.51	0.00
				November 7, 2011	9.23	1073.79	-	19.50	-0.50	0.00
MW-8604S	1083.02	19.00	15.0	May 29, 2012 November 26, 2012	9.09 9.36	1073.93 1073.66	-	19.44 19.50	-0.44 -0.50	0.00
				May 6, 2013	9.01	1074.01	-	19.45	-0.45	0.00
				November 12, 2013	9.29	1073.73	-	19.48	-0.48	0.00
				May 27, 2014 November 17, 2014	8.86 9.31	1074.16 1073.71	-	19.44 19.47	-0.44 -0.47	0.00
				May 19, 2015	9.06	1073.71	-	19.47	-0.47	0.00
				November 16, 2015	9.35	1073.67	-	19.43	-0.43	0.00
				May 9, 2016	9.49	1073.53	-	19.47	-0.47	0.00
1				November 15, 2016 May 16, 2017	10.11 8.80	1072.91 1074.22	-	19.50 19.45	-0.50 -0.45	0.00
				November 6, 2017	8.95	1074.22	-	19.45	-0.50	0.00
				May 14, 2018	9.10	1073.92	-	19.35	-0.35	0.00
				November 12, 2018	9.24	1073.78	-	19.47	-0.47	0.00
				April 21, 2008 May 6, 2008	3.46	1075.86	-	9.59	-0.15	0.00
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	5.87	1073.45	-	9.60	-0.16	0.00
				February 17, 2009 May 11, 2009	5.24	1074.08	-	9.58	-0.14	0.00
				August 5, 2009	4.12	1074.00	-	9.59	-0.14	0.00
				November 30, 2009	5.19	1074.13	-	9.56	-0.12	0.00
				February 24, 2010	5.96	1073.36	-	9.59	-0.15	0.00
				May 17, 2010 November 1, 2010	4.96 3.60	1074.36 1075.72	-	9.55 9.60	-0.11 -0.16	0.00
				May 9, 2011	4.85	1074.47	-	9.59	-0.15	0.00
				November 7, 2011	4.71	1074.61	-	9.61	-0.17	0.00
MW-9112S	1079.32	9.44	5.0	May 29, 2012 November 26, 2012	4.95 6.59	1074.37 1072.73	-	9.64 9.53	-0.20 -0.09	0.00
				May 6, 2013	4.91	1074.41	-	9.59	-0.15	0.00
				November 12, 2013	6.01	1073.31	-	9.55	-0.11	0.00
				May 27, 2014	3.50 7.10	1075.82	-	9.59 9.59	-0.15 -0.15	0.00
				November 17, 2014 May 19, 2015	6.14	1072.22 1073.18	-	9.59	-0.10	0.00
				November 16, 2015	4.84	1074.48	-	9.55	-0.11	0.00
				May 9, 2016	5.60	1073.72	-	9.56	-0.12	0.00
				November 15, 2016	7.81	1071.51	-	9.55	-0.11	0.00
				May 16, 2017 November 6, 2017	3.80 6.85	1075.52 1072.47	-	9.58 9.55	-0.14 -0.11	0.00
				May 14, 2018	5.21	1074.11	-	9.60	-0.16	0.00
				November 12, 2018	4.28	1075.04	-	9.55	-0.11	0.00
				April 21, 2008 May 6, 2008	3.28	1074.89	-	15.88	0.52	3.20
				August 5, 2008	-	-	-	-		-
				November 10, 2008	5.03	1073.14	-	15.88	0.52	3.20
				February 17, 2009 May 11, 2009	4.24	1073.93	-	15.87	0.53	3.30
				August 5, 2009	3.75	1073.93	-	15.87	0.50	3.00
				November 30, 2009	4.34	1073.83	-	15.88	0.52	3.20
				February 24, 2010	4.71	1073.46	-	15.84	0.56	3.60
				May 17, 2010 November 1, 2010	3.88 3.43	1074.29 1074.74	-	15.81 15.90	0.59	3.90 3.00
1				May 9, 2011	2.73	1075.44	-	15.89	0.51	3.10
				November 7, 2011	3.90	1074.27	-	15.90	0.50	3.00
PTMW-0202*	1078.17	16.40	10.0	May 29, 2012 November 26, 2012	3.92 4.78	1074.25 1073.39	-	15.90 15.87	0.50 0.53	3.00 3.30
				May 6, 2013	3.75	1073.39	-	15.88	0.52	3.20
				November 12, 2013	4.71	1073.46	-	15.85	0.55	3.50
				May 27, 2014	3.29	1074.88	-	15.86	0.54	3.40
				November 17, 2014 May 19, 2015	5.05 4.55	1073.12 1073.62	-	15.88 16.42	0.52 -0.02	3.20 0.00
1				November 16, 2015	3.79	1074.38	-	16.44	-0.02	0.00
				May 9, 2016	4.33	1073.84	-	16.45	-0.05	0.00
				November 15, 2016	5.35	1072.82	-	16.44	-0.04	0.00
1				May 16, 2017 November 6, 2017	3.20 5.25	1074.97 1072.92	-	16.45 16.39	-0.05 0.01	0.00
1	1			May 14, 2018	3.60	1074.57	-	16.45	-0.05	0.00

Well ID	Measuring Point	Actual Depth to	Screen	Date	Depth to Water	Groundwater	Depth to	Depth to Bottom	Accumulated Thickness of	Percent Screen Occluded By
	Elevation	Bottom	Length		(feet TOC)	Elevation	(feet TOC)	(feet TOC)	Sediments (feet)	Sediments (%)
				April 21, 2008 May 6, 2008	2.65	1073.78	-	15.98	-0.06	0.00
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008 February 17, 2009	4.42	1072.01	-	15.95	-0.03	0.00
				May 11, 2009	3.97	1072.46	-	15.92	0.00	0.00
				August 5, 2009	3.01	1073.42	-	15.91	0.01	0.10
				November 30, 2009 February 24, 2010	3.94 4.39	1072.49 1072.04	-	15.93 15.93	-0.01 -0.01	0.00
				May 17, 2010	3.35	1073.08	-	15.89	0.03	0.30
				November 1, 2010	2.72	1073.71	-	15.80	0.12	1.20
				May 9, 2011 November 7, 2011	1.83 3.41	1074.60 1073.02	-	15.92 15.82	0.00	0.00 1.00
MW-9111S	1076.43	15.92	10.0	May 29, 2012	3.60	1072.83	-	15.92	0.00	0.00
				November 26, 2012	4.54	1071.89	-	15.87	0.05	0.50
				May 6, 2013 November 12, 2013	3.43 4.64	1073.00 1071.79	-	15.90 15.85	0.02	0.20 0.70
				May 27, 2014	2.81	1073.62	-	15.74	0.18	1.80
				November 17, 2014	4.67	1071.76	-	15.88	0.04	0.40
				May 19, 2015 November 16, 2015	4.60 3.32	1071.83 1073.11	-	15.75 15.82	0.17	1.70 1.00
				May 9, 2016	4.00	1072.43	-	15.80	0.12	1.20
				November 15, 2016	5.41	1071.02	-	15.78	0.14	1.40
				May 16, 2017 November 6, 2017	2.79 4.88	1073.64 1071.55	-	15.68 15.70	0.24	2.40
				May 14, 2018	3.35	1073.08	-	15.72	0.20	2.00
				November 12, 2018	2.91	1073.52	-	15.74	0.18	1.80
				April 21, 2008 May 6, 2008	5.63	1070.82	-	7.75	0.11	2.20
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	6.88	1069.57	-	7.74	0.12	2.40
				February 17, 2009 May 11, 2009	6.16	1070.29	-	7.74	0.12	2.40
				August 5, 2009	6.12	1070.23	-	7.78	0.08	1.60
				November 30, 2009	6.53	1069.92	-	7.73	0.13	2.60
				February 24, 2010 May 17, 2010	6.91 6.23	1069.54 1070.22	-	7.73 7.71	0.13 0.15	2.60 3.00
				November 1, 2010	5.67	1070.22	-	7.75	0.13	2.20
				May 9, 2011	4.83	1071.62	-	7.76	0.10	2.00
MW-9109S	1076.45	7.86	5.0	November 7, 2011 May 29, 2012	6.07 6.18	1070.38 1070.27	-	7.78 7.78	0.08	1.60 1.60
WW-91093	1070.45	7.00	5.0	November 26, 2012	6.92	1069.53	-	7.75	0.11	2.20
				May 6, 2013	5.96	1070.49	-	7.74	0.12	2.40
				November 12, 2013 May 27, 2014	6.94 5.72	1069.51 1070.73	-	7.71 7.70	0.15 0.16	3.00 3.20
				November 17, 2014	7.52	1068.93	-	7.73	0.13	2.60
				May 19, 2015	6.98	1069.47	-	7.75	0.11	2.20
				November 16, 2015 May 9, 2016	5.92 6.45	1070.53 1070.00	-	7.74 7.75	0.12	2.40
				November 15, 2016	7.36	1069.09	-	7.75	0.11	2.20
				May 16, 2017	5.40	1071.05	-	7.76	0.10	2.00
				November 6, 2017 May 14, 2018	7.18 6.00	1069.27 1070.45	-	7.72 7.75	0.14	2.80
				November 12, 2018	5.52	1070.43	-	7.75	0.11	2.20
				April 21, 2008	4.65	1071.35	-	16.77	0.88	5.40
				May 6, 2008 August 5, 2008	-	-	-	-	-	-
				November 10, 2008	6.58	1069.42	-	16.78	0.87	5.34
				February 17, 2009	- 476	4074.01	-	- 40.71	-	
				May 11, 2009 August 5, 2009	4.76 4.56	1071.24 1071.44	-	16.74 16.75	0.91	5.58 5.52
				November 30, 2009	5.59	1071.44	-	16.75	0.90	5.52
				February 24, 2010	6.17	1069.83	-	16.75	0.90	5.52
				May 17, 2010 November 1, 2010	5.45 5.04	1070.55 1070.96	-	17.65 17.71	0.00 -0.06	0.00
				May 9, 2011	4.31	1071.69	-	17.70	-0.05	0.00
				November 7, 2011	5.13	1070.87	-	17.72	-0.07	0.00
MW-8808S	1076.00	17.65	16.3	May 29, 2012 November 26, 2012	4.71 6.31	1071.29 1069.69	-	17.74 17.72	-0.09 -0.07	0.00
				May 6, 2013	4.30	1071.70	-	17.70	-0.05	0.00
				November 12, 2013	6.34	1069.66	-	17.67	-0.02	0.00
				May 27, 2014 November 17, 2014	4.72 7.05	1071.28 1068.95	-	17.71 17.72	-0.06 -0.07	0.00
				May 19, 2015	6.10	1069.90	-	17.67	-0.02	0.00
				November 16, 2015	5.08	1070.92	-	17.68	-0.03	0.00
				May 9, 2016 November 15, 2016	5.74 6.21	1070.26 1069.79	-	17.70 17.67	-0.05 -0.02	0.00
				May 16, 2017	4.29	1009.79	-	17.70	-0.02	0.00
				November 6, 2017	6.78	1069.22	-	17.67	-0.02	0.00
				May 14, 2018 November 12, 2018	4.83 5.18	1071.17 1070.82	-	17.70 17.68	-0.05 -0.03	0.00
		I			0.10	1070.02		17.00	-0.00	0.00

Well ID	Measuring Point	Actual Depth to	Screen	onta Former MGP Site	Depth to	Groundwater	Depth to	Depth to Bottom	Accumulated Thickness of	Percent Screen Occluded By
	Elevation	Bottom	Length		(feet TOC)	Elevation	(feet TOC)	(feet TOC)	Sediments (feet)	Sediments (%)
				April 21, 2008 May 6, 2008	5.17	1072.03	-	19.71	-0.79	0.00
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	7.11	1070.09	-	19.62	-0.70	0.00
				February 17, 2009 May 11, 2009	5.74	1071.46	-	- 19.62	-0.70	0.00
				August 5, 2009	5.84	1071.46	-	19.62	-0.77	0.00
				November 30, 2009	6.08	1071.12	-	19.63	-0.71	0.00
				February 24, 2010	6.41	1070.79	-	19.67	-0.75	0.00
				May 17, 2010 November 1, 2010	5.97 5.29	1071.23 1071.91	-	19.63 19.70	-0.71 -0.78	0.00
				May 9, 2011	4.86	1072.34	-	19.68	-0.76	0.00
				November 7, 2011	5.51	1071.69	-	19.64	-0.72	0.00
MW-0201*	1077.20	18.92	5.0	May 29, 2012	5.48	1071.72	-	19.72	-0.80	0.00
				November 26, 2012 May 6, 2013	6.61 5.16	1070.59 1072.04	-	19.63 19.62	-0.71 -0.70	0.00
				November 12, 2013	6.88	1070.32	-	19.63	-0.71	0.00
				May 27, 2014	5.45	1071.75	-	19.69	-0.77	0.00
				November 17, 2014	7.33	1069.87	-	19.67	-0.75	0.00
				May 19, 2015 November 16, 2015	6.57 5.66	1070.63 1071.54	-	19.64 19.67	-0.72 -0.75	0.00
				May 9, 2016	6.22	1070.98	-	19.65	-0.73	0.00
				November 15, 2016	6.76	1070.44	-	19.65	-0.73	0.00
				May 16, 2017	5.00	1072.20	-	19.66	-0.74	0.00
				November 6, 2017 May 14, 2018	7.13 5.45	1070.07 1071.75	-	19.63 19.65	-0.71 -0.73	0.00
				November 12, 2018	5.84	1071.75	-	19.66	-0.74	0.00
				April 21, 2008	4.84	1072.82	-	20.91	1.09	10.90
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	- 5.11	1072.55	-	20.64	1.36	13.60
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	5.11	1072.55	-	20.64	1.36	13.60
				August 5, 2009	4.92	1072.74	-	20.69	1.31	13.10
				November 30, 2009 February 24, 2010	5.21 5.55	1072.45 1072.11	-	20.65	1.35 1.47	13.50 14.70
				May 17, 2010	4.99	1072.67	-	22.00	0.00	0.00
				November 1, 2010	4.74	1072.92	-	22.06	-0.06	0.00
				May 9, 2011 November 7, 2011	4.33 3.95	1073.33	-	22.05 22.08	-0.05 -0.08	0.00
MW-9110S	1077.66	22.00	10.0	May 29, 2012	4.94	1073.71 1072.72	-	22.08	-0.08	0.00
100	1077.00	22.00	10.0	November 26, 2012	5.71	1071.95	-	22.01	-0.01	0.00
				May 6, 2013	4.87	1072.79	-	22.05	-0.05	0.00
				November 12, 2013 May 27, 2014	5.63 4.70	1072.03 1072.96	-	22.01 22.01	-0.01 -0.01	0.00
				November 17, 2014	5.74	1071.92	-	22.04	-0.04	0.00
				May 19, 2015	5.42	1072.24	-	22.01	-0.01	0.00
				November 16, 2015	4.84	1072.82	-	22.02	-0.02	0.00
				May 9, 2016 November 15, 2016	5.21 5.94	1072.45 1071.72	-	22.03 22.02	-0.03 -0.02	0.00
				May 16, 2017	4.42	1071.72	-	22.02	-0.02	0.00
				November 6, 2017	5.62	1072.04	-	21.95	0.05	0.50
				May 14, 2018	4.89	1072.77	-	22.01	-0.01	0.00
				November 12, 2018 April 21, 2008	4.68 4.50	1072.98 1073.39	-	22.00 15.54	0.00 2.40	0.00 14.72
				May 6, 2008	-	-	-	-	-	
				August 5, 2008	Ü	-	-	·	-	-
				November 10, 2008	5.21	1072.68	-	15.37	2.57	15.77
				February 17, 2009 May 11, 2009	4.75	1073.14	-	15.39	2.55	15.64
				August 5, 2009	4.40	1073.49	-	15.46	2.48	15.21
				November 30, 2009	4.76	1073.13	-	15.43	2.51	15.40
				February 24, 2010 May 17, 2010	5.10 4.53	1072.79 1073.36	-	15.38 17.94	2.56 0.00	15.71 0.00
				November 1, 2010	4.38	1073.50	-	17.94	-0.04	0.00
				May 9, 2011	4.15	1073.74	-	17.97	-0.03	0.00
A # A A A A A A A A A A A A A A A A A A	46	,		November 7, 2011	4.61	1073.28	-	17.98	-0.04	0.00
MW-8807S	1077.89	17.94	16.3	May 29, 2012 November 26, 2012	4.65 5.19	1073.24 1072.70	-	17.99 17.98	-0.05 -0.04	0.00
				May 6, 2013	4.56	1073.33	-	17.98	-0.04	0.00
				November 12, 2013	5.91	1071.98	-	17.94	0.00	0.00
				May 27, 2014 November 17, 2014	4.39 5.32	1073.50	-	17.97 17.95	-0.03 -0.01	0.00
				May 19, 2015	4.90	1072.57 1072.99	-	17.95	-0.01	0.00
				November 16, 2015	4.45	1073.44	-	17.98	-0.04	0.00
				May 9, 2016	4.86	1073.03	-	17.97	-0.03	0.00
				November 15, 2016	5.53	1072.36	-	17.96	-0.02	0.00
				May 16, 2017	4.05	1073.84	-	17.98 17.96	-0.04 -0.02	0.00
				November 6 2017	5.19					
				November 6, 2017 May 14, 2018	5.19 4.41	1072.70 1073.48	-	17.98	-0.04	0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	4.38	1070.98	-	18.57	0.15	0.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	6.35	1069.01	-	18.58	0.14	0.00
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	4.58	1070.78	-	18.56	0.16	0.00
				August 5, 2009	5.16	1070.20	-	18.52	0.20	0.00
				November 30, 2009	5.34 5.91	1070.02 1069.45	-	18.54 18.54	0.18	0.00
				February 24, 2010 May 17, 2010	5.16	1009.45	-	18.72	0.00	0.00
				November 1, 2010	4.69	1070.67	-	18.75	-0.03	0.00
				May 9, 2011	3.94	1071.42	-	18.74	-0.02	0.00
				November 7, 2011	4.80	1070.56	-	18.78	-0.06	0.00
MW-0301*	1075.36	18.72	10.0	May 29, 2012	4.45	1070.91	-	18.78	-0.06	0.00
				November 26, 2012 May 6, 2013	6.01 4.06	1069.35 1071.30	-	18.74 18.50	-0.02 0.22	0.00 0.20
				November 12, 2013	6.07	1069.29	-	18.72	0.00	0.00
				May 27, 2014	4.42	1070.94	-	18.75	-0.03	0.00
				November 17, 2014	6.68	1068.68	-	18.79	-0.07	0.00
				May 19, 2015	5.88	1069.48	-	18.74	-0.02	0.00
				November 16, 2015	4.72	1070.64	-	18.73	-0.01	0.00
				May 9, 2016	5.39 5.99	1069.97 1069.37	-	18.73	-0.01	0.00
				November 15, 2016 May 16, 2017	5.99 4.01	1069.37	-	18.74 18.75	-0.02 -0.03	0.00
				November 6, 2017	6.35	1069.01	-	18.72	0.00	0.00
				May 14, 2018	4.69	1070.67	-	18.75	-0.03	0.00
				November 12, 2018	4.80	1070.56	-	18.76	-0.04	0.00
				April 21, 2008	4.73	1074.37	-	18.66	0.64	3.93
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008		-	-	-	-	-
				November 10, 2008 February 17, 2009	5.72	1073.38	-	18.67	0.63	3.87
				May 11, 2009	5.30	1073.80	-	18.60	0.70	4.29
				August 5, 2009	4.80	1074.30	-	18.67	0.63	3.87
				November 30, 2009	5.23	1073.87	-	18.56	0.74	4.54
				February 24, 2010	5.62	1073.48	-	18.65	0.65	3.99
				May 17, 2010 November 1, 2010	4.97 4.65	1074.13 1074.45	-	19.30 19.37	0.00 -0.07	0.00
				May 9, 2011	4.33	1074.77	-	19.35	-0.05	0.00
				November 7, 2011	5.09	1074.01	-	19.38	-0.08	0.00
MW-8806S	1079.10	19.30	16.3	May 29, 2012	5.02	1074.08	-	19.37	-0.07	0.00
				November 26, 2012	5.64	1073.46	-	19.34	-0.04	0.00
				May 6, 2013	4.91 5.62	1074.19	-	19.35	-0.05	0.00
				November 12, 2013 May 27, 2014	4.64	1073.48 1074.46	-	19.30 19.34	0.00 -0.04	0.00
				November 17, 2014	5.52	1073.58	-	19.32	-0.02	0.00
				May 19, 2015	5.16	1073.94	-	19.29	0.01	0.06
				November 16, 2015	4.88	1074.22	-	19.30	0.00	0.00
				May 9, 2016	5.32	1073.78	-	19.30	0.00	0.00
				November 15, 2016	6.21	1072.89	-	19.31	-0.01	0.00
				May 16, 2017 November 6, 2017	4.16 5.75	1074.94 1073.35	-	19.30 19.30	0.00	0.00
				May 14, 2018	4.78	1073.33	-	19.30	0.00	0.00
				November 12, 2018	4.74	1074.36	-	19.29	0.01	0.06
				April 21, 2008	5.20	1074.73	-	15.26	0.03	0.26
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	- 15.20	- 0.00	- 0.00
				November 10, 2008 February 17, 2009	-	-	-	15.29	0.00	0.00
				May 11, 2009	-	-	-	15.23	0.06	0.51
				August 5, 2009	4.88	1075.05	-	15.12	0.17	1.45
				November 30, 2009	-	-	-	15.23	0.06	0.51
				February 24, 2010	-	-	-	- 44.70	- 0.50	-
				May 17, 2010 November 1, 2010	4.68	1075.25	-	14.70 14.40	0.59	5.04 7.61
AW-01	1079.68	15.04	11.7	May 9, 2011	4.00	1073.23	-	14.40	0.69	5.90
				November 7, 2011	4.83	1074.85	-	14.53	0.51	4.36
				May 29, 2012	4.85	1074.83	-	14.52	0.52	4.44
				November 26, 2012	5.16	1074.52	-	14.40	0.64	5.47
				May 6, 2013 November 12, 2013	4.89 4.82	1074.79 1074.86	-	15.14 15.12	-0.10 -0.08	0.00
				May 27, 2014	4.82	1074.86	-	15.12	0.05	0.00
				May 19, 2015	-	-	-	15.00	0.04	0.34
				May 9, 2016	4.86	1074.82	-	15.50	-0.46	0.00
				May 16, 2017	4.60	1075.08	-	14.98	0.06	0.51
				May 14, 2018	4.80	1074.88	-	15.05	-0.01	0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	4.85	1074.72	-	13.79	0.90	15.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	-	-	13.70	0.99	16.50
				February 17, 2009	-	-	-	12.40	- 1 21	- 20.17
				May 11, 2009 August 5, 2009	4.54	1075.03	-	13.48 13.41	1.21	20.17 21.33
				November 30, 2009	-	-	-	13.29	1.40	23.33
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	-	-	-	14.53	0.16	2.67
AW-02	1079.57	14.69	6.0	November 1, 2010	4.47	1075.10	-	14.34	0.35	5.83
AVV-02	1079.37	14.03	0.0	May 9, 2011	4.55	1075.02	-	14.33	0.36	6.00
				November 7, 2011	4.60	1074.97	-	14.45	0.24	4.00
				May 29, 2012	4.61	1074.96	-	14.31	0.38	6.33
				November 26, 2012 May 6, 2013	4.95 4.65	1074.62 1074.92	-	14.34 14.29	0.35	5.83 6.67
				November 12, 2013	4.61	1074.92		14.29	0.32	5.33
				May 27, 2014	4.52	1075.05	-	14.28	0.41	6.83
				May 19, 2015	-	-	-	14.27	0.42	7.00
				May 9, 2016	4.68	1074.89	-	14.33	0.36	6.00
				May 16, 2017	4.39	1075.18	-	14.20	0.49	8.17
				May 14, 2018	4.60	1074.97	-	14.19	0.50	8.33
				April 21, 2008	4.96	1074.73	-	14.83	2.30	28.75
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	-	-	-	14.65	2.48	31.00
				February 17, 2009	-	-		14.65	2.40	31.00
				May 11, 2009	_	-	-	14.27	2.86	35.75
				August 5, 2009	4.93	1074.76	-	14.35	2.78	34.75
				November 30, 2009	-	-	-	14.25	2.88	36.00
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	-	-	-	17.13	0.00	0.00
AW-03	1079.69	17.13	8.0	November 1, 2010	4.56	1075.13	-	17.21	-0.08	0.00
				May 9, 2011	4.68 4.69	1075.01 1075.00	-	17.10 17.15	0.03 -0.02	0.37
				November 7, 2011 May 29, 2012	4.69	1075.00	-	17.15	0.12	1.50
				November 26, 2012	5.05	1074.64		17.15	-0.02	0.00
				May 6, 2013	4.77	1074.92	-	17.10	0.03	0.37
				November 12, 2013	4.71	1074.98	-	17.12	0.01	0.12
				May 27, 2014	4.66	1075.03	-	16.97	0.16	2.00
				May 19, 2015	-	-	-	17.05	0.08	1.00
				May 9, 2016	4.79	1074.90	-	17.10	0.03	0.37
				May 16, 2017	4.45	1075.24	-	16.88	0.25	3.13
				May 14, 2018 April 21, 2008	4.67 7.01	1075.02 1074.73	-	16.90 17.95	0.23 1.45	2.88 14.50
				April 21, 2008 May 6, 2008	7.01	10/4./3	-	17.95	1.45	14.50
				August 5, 2008	-	-	-		-	-
				November 10, 2008	-	-	-	17.75	1.65	16.50
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	-	-	-	17.52	1.88	18.80
				August 5, 2009	6.71	1075.03	-	17.59	1.81	18.10
				November 30, 2009	-	-	-	17.32	2.08	20.80
				February 24, 2010	-	-	-	- 40.40	-	-
				May 17, 2010	_	1075 20	-	19.40	0.00	0.00
AW-04	1081.31	18.97	10.0	November 1, 2010 May 9, 2011	6.45 6.54	1075.29 1074.77	-	19.28 19.27	0.12 -0.30	1.20 0.00
				November 7, 2011	6.58	1074.77	-	19.27	-0.30	0.00
				May 29, 2012	6.60	1074.71	-	19.30	-0.33	0.00
				November 26, 2012	6.93	1074.38	-	19.23	-0.26	0.00
				May 6, 2013	6.65	1074.66	-	19.24	-0.27	0.00
				November 12, 2013	6.95	1074.36	-	19.14	-0.17	0.00
				May 27, 2014	6.51	1074.80	-	19.22	-0.25	0.00
				May 19, 2015	-	-	-	19.19	-0.22	0.00
				May 9, 2016	6.64	1074.67 1074.99	-	19.24	-0.27	0.00
				May 16, 2017 May 14, 2018	6.32 6.42	1074.99	-	19.20 19.24	-0.23 -0.27	0.00
				Way 14, 2018	0.42	1074.09		19.24	-0.27	0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	6.27	1074.73	-	15.54	0.71	8.35
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	-	-	15.65	0.60	7.06
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	-	-	-	15.21	1.04	12.24
				August 5, 2009	5.98	1075.02	-	15.38	0.87	10.24
				November 30, 2009 February 24, 2010	-	-	-	15.15	1.10	12.94
				May 17, 2010	-	-	-	16.25	0.00	0.00
				November 1, 2010	5.88	1075.12	-	16.25	-0.11	0.00
AW-05	1081.00	16.25	8.5	May 9, 2011	5.99	1075.01		16.23	0.02	0.24
				November 7, 2011	6.01	1074.99	-	16.25	0.00	0.00
				May 29, 2012	6.05	1074.95	-	16.30	-0.05	0.00
				November 26, 2012	6.35	1074.65	-	16.24	0.01	0.12
				May 6, 2013	6.08	1074.92	-	16.29	-0.04	0.00
				November 12, 2013	6.82	1074.18	-	16.20	0.05	0.59
	1	1	1	May 27, 2014	5.96	1075.04	-	16.22	0.03	0.35
	1	1	1	May 19, 2015	-	-	-	16.19	0.06	0.71
	1	1	1	May 9, 2016	6.09	1074.91	-	16.20	0.05	0.59
	1	1	1	May 16, 2017	5.76	1075.24	-	16.22	0.03	0.35
				May 14, 2018	6.00	1075.00	-	16.23	0.02	0.24
				April 21, 2008	6.00	1074.72	-	14.45	0.35	3.89
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	-	-	14.83	-0.03	0.00
				February 17, 2009	-	-	-	- 44.44	- 0.00	- 7.67
				May 11, 2009 August 5, 2009	- 5.71	1075.01	-	14.11 13.90	0.69	7.67 10.00
				November 30, 2009	5.71	1075.01	-	14.00	0.80	8.89
				February 24, 2010	-	-		14.00	0.60	0.09
				May 17, 2010	-	-		13.76	1.04	11.56
				November 1, 2010	5.61	1075.11	-	13.60	1.20	13.33
AW-06	1080.72	14.80	9.0	May 9, 2011	5.71	1075.01	-	13.65	1.15	12.78
				November 7, 2011	5.74	1074.98	-	13.76	1.04	11.56
				May 29, 2012	5.78	1074.94	-	13.72	1.08	12.00
				November 26, 2012	6.08	1074.64	-	13.74	1.06	11.78
				May 6, 2013	5.81	1074.91	-	14.85	-0.05	0.00
				November 12, 2013	5.73	1074.99	-	14.28	0.52	5.78
				May 27, 2014	5.68	1075.04	-	14.51	0.29	3.22
				May 19, 2015	-	-	-	14.76	0.04	0.44
	1	1	1	May 9, 2016	5.82	1074.90	-	14.69	0.11	1.22
	1	1	1	May 16, 2017	5.51	1075.21	-	14.51	0.29	3.22
	1			May 14, 2018	5.67	1075.05	-	14.51	0.29	3.22
	1	1	1	April 21, 2008	5.65	1074.73	-	14.40	0.16	1.78
	1	1	1	May 6, 2008	-		-	-	-	-
	1	1	1	August 5, 2008 November 10, 2008	-	-	-	14.47	0.09	1.00
	1	1	1	February 17, 2009	-	-	-	14.47	-	1.00
	1	1	1	May 11, 2009	-	-	-	14.42	0.14	1.56
				August 5, 2009	5.38	1075.00	-	14.42	0.15	1.67
				November 30, 2009	-	-	-	14.32	0.24	2.67
				February 24, 2010	-	-	-	-	-	-
	1	1	1	May 17, 2010	-	-	-	14.25	0.31	3.44
AW-07	1080.38	14.56	9.0	November 1, 2010	5.27	1075.11	-	14.35	0.21	2.33
AVV-U/	1060.38	14.56	9.0	May 9, 2011	5.36	1075.02		14.35	0.21	2.33
	1	1	1	November 7, 2011	5.40	1074.98	-	14.40	0.16	1.78
				May 29, 2012	5.44	1074.94	-	14.38	0.18	2.00
	1	1	1	November 26, 2012	5.74	1074.64	-	14.36	0.20	2.22
	1	1	1	May 6, 2013	5.46	1074.92	-	14.35	0.21	2.33
	1	1	1	November 12, 2013	5.43	1074.95	-	14.33	0.23	2.56
	1	1	1	May 27, 2014	5.34	1075.04	-	14.19	0.37	4.11
	1	1	1	May 19, 2015	-	-	-	14.32	0.24	2.67
				May 9, 2016	5.47	1074.91	-	14.28	0.28	3.11
				May 16, 2017	5.11	1075.27	-	14.22	0.34	3.78
	1	l	l	May 14, 2018	5.35	1075.03	-	14.25	0.31	3.44

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	5.59	1074.67	-	14.21	0.07	0.87
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	-	-	14.32	-0.04	0.00
				February 17, 2009 May 11, 2009	-	-	-	14.22	0.06	0.75
				August 5, 2009	5.25	1075.01	-	14.22	0.16	2.00
				November 30, 2009	-	-	_	14.18	0.10	1.25
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	-	-	-	13.87	0.41	5.13
AW-08	1079.93	13.95	8.0	November 1, 2010	5.02	1075.24	-	13.97	0.31	3.87
AVV-06	1079.93	13.93	6.0	May 9, 2011	5.11	1074.82	-	13.74	0.21	2.62
				November 7, 2011	5.16	1074.77	-	13.32	0.63	7.87
				May 29, 2012	5.19	1074.74	-	13.29	0.66	8.25
				November 26, 2012	5.49	1074.44	-	13.27	0.68	8.50
				May 6, 2013	5.23	1074.70	-	14.15	-0.20	0.00
				November 12, 2013	5.18	1074.75	-	13.75	0.20	2.50
				May 27, 2014	5.10	1074.83	-	13.21 13.27	0.74	9.25 8.50
				May 19, 2015		4074.74	-		0.68	
				May 9, 2016	5.22 4.90	1074.71	-	13.29	0.66 0.67	8.25 8.38
				May 16, 2017 May 14, 2018	5.10	1075.03 1074.83	-	13.28 13.28	0.67	8.38
				April 21, 2008	5.42	1074.73	-	15.11	0.02	0.27
				May 6, 2008		1074.73		10.11	- 0.02	-
				August 5, 2008		-	-	-	-	-
				November 10, 2008	_	-	-	15.19	-0.06	0.00
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	-	-	-	14.95	0.18	2.40
				August 5, 2009	5.13	1075.02	-	14.90	0.23	3.07
				November 30, 2009	-	-	-	14.80	0.33	4.40
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	-	-	-	13.72	1.41	18.80
AW-09	1080.15	15.13	7.5	November 1, 2010	5.03	1075.12	-	13.75	1.38	18.40
				May 9, 2011	5.12	1075.03	-	14.85	0.28	3.73
				November 7, 2011	5.17	1074.98	-	14.79	0.34	4.53
				May 29, 2012	5.18	1074.97	-	14.82	0.31	4.13
				November 26, 2012	5.51 5.25	1074.64 1074.90	-	14.83 14.90	0.30	4.00 3.07
				May 6, 2013 November 12, 2013	5.25	1074.90	-	14.90	0.38	5.07
				May 27, 2014	5.12	1075.03		14.73	0.84	11.20
				May 19, 2015	-	-	-	14.65	0.48	6.40
				May 9, 2016	5.23	1074.92	-	14.60	0.53	7.07
				May 16, 2017	4.87	1075.28	-	14.43	0.70	9.33
				May 14, 2018	5.13	1075.02	-	14.44	0.69	9.20
				April 21, 2008	5.04	1074.74	-	15.90	0.00	0.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
		1		November 10, 2008	-	-	-	15.92	-0.02	0.00
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	-	-	-	15.33	0.57	8.14
		1		August 5, 2009	4.77	1075.01	-	15.50	0.40	5.71
				November 30, 2009	-	-	-	15.30	0.60	8.57
				February 24, 2010 May 17, 2010	-	-	-	- 15.24	0.66	9.43
		1		November 1, 2010	4.66	1075.12	-	15.24	0.76	10.86
AW-10	1079.78	15.90	7.0	May 9, 2011	4.00	1075.12	-	14.80	1.10	15.71
				November 7, 2011	4.77	1075.01	-	15.37	0.53	7.57
		1		May 29, 2012	4.80	1074.98	-	15.25	0.65	9.29
				November 26, 2012	5.13	1074.65	-	15.20	0.70	10.00
		1		May 6, 2013	4.85	1074.93	-	15.92	-0.02	0.00
		1		November 12, 2013	4.81	1074.97	-	15.55	0.35	5.00
				May 27, 2014	4.73	1075.05	-	14.72	1.18	16.86
		1		May 19, 2015	-	-	-	15.10	0.80	11.43
		1		May 9, 2016	4.87	1074.91	-	14.85	1.05	15.00
				May 16, 2017	4.52	1075.26	-	14.78	1.12	16.00
]		May 14, 2018	4.81	1074.97	-	14.80	1.10	15.71

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	6.01	1074.73	-	16.19	0.11	1.57
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	-	-	-	40.00	-	- 0.57
				February 17, 2009	-	-	-	16.26	0.04	0.57
				May 11, 2009	-	-	-	16.12	0.18	2.57
				August 5, 2009	5.72	1075.02	-	16.02	0.28	4.00
				November 30, 2009	-	ı	-	15.80	0.50	7.14
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010 November 1, 2010	5.29	1075.45	-	15.60 15.27	0.70 1.03	10.00 14.71
AW-11	1080.20	16.30	7.0	May 9, 2011	5.42	1073.43	-	15.76	0.54	7.71
				November 7, 2011	4.45	1075.75	-	14.93	1.37	19.57
				May 29, 2012	5.47	1074.73	-	15.13	1.17	16.71
				November 26, 2012	5.80	1074.40	-	15.04	1.26	18.00
				May 6, 2013	5.52	1074.68	-	15.92	0.38	5.43
				November 12, 2013 May 27, 2014	5.45 5.40	1074.75 1074.80	-	15.67 15.54	0.63 0.76	9.00 10.86
				May 19, 2015	5.40	1074.80	-	15.54	0.78	11.14
				May 9, 2016	5.52	1074.68	-	15.57	0.73	10.43
				May 16, 2017	5.15	1075.05	-	15.56	0.74	10.57
				May 14, 2018	5.46	1074.74	-	15.56	0.74	10.57
				April 21, 2008	4.73	1074.74	-	19.39	0.04	0.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	-	-	-	19.76	-0.33	0.00
				February 17, 2009	-	-		-	-0.55	-
				May 11, 2009	-	-	18.72	19.22	0.21	0.00
				August 5, 2009	4.42	1075.05	18.80	19.30	0.13	0.00
				November 30, 2009	4.42	1075.05	18.06	19.40	0.03	0.00
				February 24, 2010	4.72	1074.75	18.88	19.38	0.05	0.00
				May 17, 2010	4.44 4.32	1075.03	19.17 19.06	19.37 19.76	0.06 -0.33	0.00
				November 1, 2010 May 9, 2011	4.32	1075.15 1075.04	19.06	19.76	-0.33	0.00
				November 7, 2011	4.47	1075.00	19.26	19.76	-0.33	0.00
AW-12*	1079.47	19.43	10.0	May 29, 2012	4.51	1074.96	-	19.73	-0.30	0.00
				November 26, 2012	4.83	1074.64	-	19.73	-0.30	0.00
				May 6, 2013	4.55	1074.92	-	19.73	-0.30	0.00
				November 12, 2013	4.48	1074.99	-	19.73	-0.30	0.00
				May 27, 2014 November 17, 2014	4.42	1075.05	-	18.65 19.32	0.78 0.11	0.00
				May 19, 2015	-	-	-	19.23	0.20	0.00
				November 18, 2015	-	-	-	-	-	-
				May 9, 2016	4.58	1074.89	-	18.50	0.93	0.00
				November 15, 2016	4.38	1075.09	-	18.55	0.88	0.00
				May 16, 2017	4.41	1075.06	-	19.25	0.18	0.00
				November 6, 2017	4.57	1074.90	-	19.05	0.38	0.00
				May 14, 2018 November 14, 2018	4.40 4.29	1075.07 1075.18	-	19.40 19.29	0.03 0.14	0.00
				April 21, 2008	4.29	1073.16	-	19.29	-0.02	0.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	-	-	19.35	-0.35	0.00
				February 17, 2009	-	-	-	- 40.04	- 0.46	-
				May 11, 2009	4.37	1075.02	-	18.84 18.98	0.16 0.02	1.45 0.18
				August 5, 2009 November 30, 2009	4.37	1075.02	-	18.98	0.02	1.45
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	-	1	-	18.89	0.11	1.00
AW-13	1079.39	19.00	11.0	November 1, 2010	4.25	1075.14	-	18.54	0.46	4.18
,				May 9, 2011	4.37	1075.02	-	18.63	0.37	3.36
				November 7, 2011	4.40	1074.99	-	18.45	0.55	5.00
				May 29, 2012 November 26, 2012	4.42 4.74	1074.97 1074.65	-	18.57 18.55	0.43 0.45	3.91 4.09
				May 6, 2013	4.74	1074.03	-	18.54	0.46	4.18
				November 12, 2013	4.41	1074.98	-	18.42	0.58	5.27
				May 27, 2014	4.35	1075.04	-	18.25	0.75	6.82
				May 19, 2015	-	-	-	18.20	0.80	7.27
				May 9, 2016	4.45	1074.94	-	18.27	0.73	6.64
				May 16, 2017	4.13	1075.26	-	18.25	0.75	6.82
		l		May 14, 2018	4.40	1074.99	-	18.20	0.80	7.27

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	4.01	1075.59	-	20.05	3.00	75.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	-		-	20.05	3.00	75.00
				February 17, 2009	-	-	-	- 20.05	3.00	75.00
				May 11, 2009	-	-	-	19.91	3.14	78.50
				August 5, 2009	4.26	1075.34	-	19.97	3.08	77.00
				November 30, 2009		-	-	19.90	3.15	78.75
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010 November 1, 2010	4.22	1075.38	-	20.15 19.86	2.90 3.19	72.50 79.75
AW-14	1079.60	23.05	4.0	May 9, 2011	3.39	1075.36	-	21.05	2.00	50.00
				November 7, 2011	4.45	1075.15	_	21.94	1.11	27.75
				May 29, 2012	4.25	1075.35	-	20.80	2.25	56.25
				November 26, 2012	5.34	1074.26	-	20.75	2.30	57.50
				May 6, 2013	4.27	1075.33	-	20.65	2.40	60.00
				November 12, 2013	5.28	1074.32	-	20.73	2.32	58.00
				May 27, 2014	3.79	1075.81	-	20.66	2.39	59.75
				May 19, 2015 May 9, 2016	4.80	1074.80	-	20.57 20.60	2.48 2.45	62.00 61.25
				May 16, 2017	3.80	1075.80		20.64	2.41	60.25
				May 14, 2018	4.10	1075.50	-	20.64	2.41	60.25
				April 21, 2008	4.27	1075.58	-	19.34	-0.01	0.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-	1	-	-	1	-
				November 10, 2008	-	-	-	19.34	-0.01	0.00
				February 17, 2009	-	-	-	- 40.00	-	-
				May 11, 2009 August 5, 2009	4.52	1075.33	-	19.30 19.35	0.03 -0.02	1.00 0.00
				November 30, 2009	- 4.52	-	-	19.30	0.02	1.00
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	-	1	-	19.28	0.05	1.67
AW-15	1079.85	19.33	3.0	November 1, 2010	4.41	1075.44	-	19.86	-0.53	0.00
7	1070.00	10.00	0.0	May 9, 2011	3.66	1076.19	-	19.29	0.04	1.33
				November 7, 2011	4.69	1075.16	-	19.36	-0.03	0.00
				May 29, 2012 November 26, 2012	4.51 5.60	1075.34 1074.25	-	19.32 19.31	0.01 0.02	0.33 0.67
				May 6, 2013	4.53	1074.23	-	19.31	0.02	7.67
				November 12, 2013	5.56	1074.29	-	19.26	0.07	2.33
				May 27, 2014	4.01	1075.84	-	19.08	0.25	8.33
				May 19, 2015	-	-	-	19.42	-0.09	0.00
				May 9, 2016	5.05	1074.80	-	19.25	0.08	2.67
				May 16, 2017	4.01	1075.84	-	19.26	0.07	2.33
				May 14, 2018 April 21, 2008	4.35 4.04	1075.50 1075.57	-	19.26 17.76	0.07 0.63	2.33 21.00
				May 6, 2008	4.04	10/5.5/	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	1	-	17.70	0.69	23.00
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	-	-	-	17.69	0.70	23.33
				August 5, 2009	4.30	1075.31	-	17.71	0.68	22.67
			1	November 30, 2009 February 24, 2010	-	-	-	17.69	0.70	23.33
	AW-16 1079.61 18.39		1	May 17, 2010	-	-	-	18.39	0.00	0.00
				November 1, 2010	4.19	1075.42	-	18.47	-0.08	0.00
AW-16		18.39	3.0	May 9, 2011	3.39	1076.22	-	18.46	-0.07	0.00
				November 7, 2011	4.44	1075.17	-	18.48	-0.09	0.00
				May 29, 2012	4.29	1075.32	-	18.47	-0.08	0.00
				November 26, 2012	5.37	1074.24	-	18.45	-0.06	0.00
				May 6, 2013	4.32	1075.29	-	18.42	-0.03	0.00
				November 12, 2013 May 27, 2014	5.31 3.86	1074.30 1075.75	-	18.39 18.40	0.00 -0.01	0.00
				May 19, 2015	-	-		18.39	0.00	0.00
				May 9, 2016	4.86	1074.75	-	18.44	-0.05	0.00
				May 16, 2017	3.83	1075.78	-	18.45	-0.06	0.00
				May 14, 2018	4.21	1075.40	-	18.45	-0.06	0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	4.83	1074.73	-	14.67	-0.02	0.00
				May 6, 2008	4.85	1074.71	-	14.50	0.15	2.50
				August 5, 2008 November 10, 2008	4.76 4.83	1074.80 1074.73	-	14.52 14.62	0.13	2.17 0.50
				February 17, 2009	4.50	1075.06	-	14.50	0.15	2.50
				May 11, 2009	4.64	1074.92	-	14.47	0.18	3.00
				August 5, 2009	4.53	1075.03	-	14.52	0.13	2.17
				November 30, 2009	4.46	1075.10	-	14.41	0.24	4.00
				February 24, 2010 May 17, 2010	4.65 4.62	1074.91 1074.94	-	14.52 14.48	0.13	2.17 2.83
ĺ				November 1, 2010	4.45	1075.11	-	14.47	0.18	3.00
				May 9, 2011	4.54	1075.02	-	14.47	0.18	3.00
				November 7, 2011	4.57	1074.99	-	14.50	0.15	2.50
PMW-01	1079.56	14.65	6.0	May 29, 2012	4.60	1074.96	-	14.51	0.14	2.33
				November 26, 2012	4.93	1074.63	-	14.45	0.20	3.33
ĺ				May 6, 2013 November 12, 2013	4.64 4.59	1074.92 1074.97	-	14.44 14.44	0.21	3.50 3.50
ĺ				May 27, 2014	4.54	1075.02	-	14.44	0.21	3.50
ĺ				November 17, 2014	4.00	1075.56	-	14.40	0.25	4.17
ĺ				May 19, 2015	4.39	1075.17	-	14.40	0.25	4.17
ĺ				November 16, 2015	4.69	1074.87	-	14.46	0.19	3.17
			1	May 9, 2016	4.63	1074.93	-	14.43	0.22	3.67
				November 15, 2016	4.97	1074.59	-	14.38	0.27	4.50
				May 16, 2017	4.31	1075.25	-	14.40	0.25	4.17
			1	November 6, 2017 May 14, 2018	4.65	1074.91	-	- 14.40	0.25	4.17
ĺ				November 12, 2018	4.45	1075.11		14.43	0.22	3.67
				April 21, 2008	5.74	1073.11	-	11.73	-0.08	0.00
ĺ				May 6, 2008	6.09	1073.67	-	11.66	-0.01	0.00
ĺ				August 5, 2008	6.22	1073.54	-	11.62	0.03	1.00
				November 10, 2008	6.42	1073.34	-	11.68	-0.03	0.00
ĺ				February 17, 2009	5.50	1074.26	-	11.62	0.03	1.00
				May 11, 2009 August 5, 2009	6.04 5.63	1073.72 1074.13	-	11.65 11.71	0.00 -0.06	0.00
ĺ				November 30, 2009	5.89	1073.87	-	11.55	0.10	3.33
ĺ				February 24, 2010	6.30	1073.46	-	11.66	-0.01	0.00
ĺ				May 17, 2010	5.86	1073.90	-	11.60	0.05	1.67
ĺ				November 1, 2010	5.50	1074.26	-	11.68	-0.03	0.00
				May 9, 2011	5.36 5.90	1074.40	-	11.67 11.67	-0.02	0.00
PMW-02*	1079.64	11.53	3.0	November 7, 2011 May 29, 2012	5.90	1073.86 1073.86	-	11.70	-0.02 -0.05	0.00
PIVIVV-U2"	1079.64	11.53	3.0	November 26, 2012	6.41	1073.35	-	11.65	0.00	0.00
ĺ				May 6, 2013	5.79	1073.97	-	11.68	-0.03	0.00
ĺ				November 12, 2013	6.35	1073.41	-	11.64	0.01	0.33
ĺ				May 27, 2014	5.59	1074.17	-	11.69	-0.04	0.00
ĺ				November 17, 2014	-	-	-	-	-	-
				May 19, 2015	5.86 6.01	1073.90	-	11.60	0.05	1.67 0.67
				November 16, 2015 May 9, 2016	6.18	1073.75 1073.46	-	11.63 11.51	0.02	0.67
ĺ				November 15, 2016	6.86	1072.78	_	11.50	0.03	1.00
ĺ				May 16, 2017	5.20	1074.44	-	11.53	0.00	0.00
			1	November 6, 2017	-		-	-	-	-
			1	May 14, 2018	5.70	1073.94	-	11.53	0.00	0.00
			1	November 12, 2018	5.68	1073.96	-	11.53	0.00	0.00
				April 21, 2008	5.06 5.11	1074.74 1074.69	-	14.59 14.60	-0.02 -0.03	0.00
				May 6, 2008 August 5, 2008	4.99	1074.89	-	14.59	-0.03	0.00
				November 10, 2008	5.07	1074.73	-	14.59	-0.02	0.00
				February 17, 2009	4.79	1075.01	-	14.55	0.02	0.22
				May 11, 2009	4.87	1074.93	-	14.57	0.00	0.00
			1	August 5, 2009	4.78	1075.02	-	14.62	-0.05	0.00
			1	November 30, 2009	4.28 4.89	1075.52 1074.91	-	14.58 14.58	-0.01 -0.01	0.00
				February 24, 2010 May 17, 2010	4.89	1074.91	-	14.58	-0.01	0.00
				November 1, 2010	4.70	1075.10	-	14.58	-0.01	0.00
				May 9, 2011	4.76	1075.04	-	14.58	-0.01	0.00
				November 7, 2011	4.82	1074.98	-	14.50	0.07	0.78
PMW-03	PMW-03 1079.80	14.57	9.0	May 29, 2012	4.81	1074.99	-	14.37	0.20	2.22
			1	November 26, 2012	5.16	1074.64 1074.92	-	14.45 14.50	0.12	1.33
				May 6, 2013 November 12, 2013	4.88 4.88	1074.92	-	14.50	0.07	0.78 0.67
				May 27, 2014	4.79	1074.92	-	14.50	0.07	0.78
				November 17, 2014	5.83	1073.97	-	14.52	0.05	0.56
			1	May 19, 2015	3.35	1076.45	-	14.49	0.08	0.89
	•	Ī	1	November 16, 2015	4.91	1074.89	-	14.52	0.05	0.56
ļ					4.00	1074.94	-	14.51	0.06	0.67
				May 9, 2016	4.86					
				November 15, 2016	5.21	1074.59	-	14.51	0.06	0.67
				November 15, 2016 May 16, 2017			-			
				November 15, 2016	5.21	1074.59	-	14.51	0.06	0.67

PMW-04	1080.88	14.50	9.0	April 21, 2008 May 6, 2008 August 5, 2008 November 10, 2008 February 17, 2009 May 11, 2009 August 5, 2009 November 30, 2009 February 24, 2010 May 17, 2010 May 17, 2010 Movember 1, 2011 November 7, 2011 May 29, 2012 May 6, 2013 November 12, 2013 November 12, 2013	6.16 6.21 6.05 6.15 5.85 5.95 5.87 5.97 5.93 5.77 5.93 5.77 5.96 5.90	1074.72 1074.67 1074.83 1074.73 1075.03 1074.93 1075.01 1075.10 1074.91 1074.91 1075.02 1074.92 1075.11	-	14.54 14.55 14.49 14.56 14.49 14.53 14.56 14.40 14.53 14.49 14.52	-0.04 -0.05 0.01 -0.06 0.01 -0.03 -0.06 0.10 -0.03 0.01 -0.03	0.00 0.00 0.11 0.00 0.11 0.00 0.00 1.11 0.00 0.11 0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	August 5, 2008 November 10, 2008 February 17, 2009 May 11, 2009 August 5, 2009 November 30, 2009 February 24, 2010 May 17, 2010 November 1, 2010 November 7, 2011 May 29, 2012 November 26, 2012 November 26, 2012 November 28, 2013 November 12, 2013	6.05 6.15 5.85 5.95 5.87 5.78 5.97 5.93 5.77 5.86 5.90 5.91 6.24	1074.83 1074.73 1075.03 1074.93 1075.01 1075.10 1074.91 1074.95 1075.11 1075.02 1074.98		14.49 14.56 14.49 14.53 14.56 14.40 14.53 14.49 14.52	0.01 -0.06 0.01 -0.03 -0.06 0.10 -0.03 0.01 -0.02	0.11 0.00 0.11 0.00 0.00 1.11 0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	November 10, 2008 February 17, 2009 May 11, 2009 August 5, 2009 November 30, 2009 February 24, 2010 May 17, 2010 November 1, 2010 Movember 1, 2011 Movember 7, 2011 Movember 20, 2012 Movember 26, 2012 Movember 26, 2013 November 12, 2013	6.15 5.85 5.95 5.87 5.78 5.97 5.93 5.77 5.86 5.90 5.91 6.24	1074.73 1075.03 1074.93 1075.01 1075.01 1074.91 1074.95 1075.11 1075.02 1074.98		14.56 14.49 14.53 14.56 14.40 14.53 14.49 14.52 14.52	-0.06 0.01 -0.03 -0.06 0.10 -0.03 0.01 -0.02	0.00 0.11 0.00 0.00 1.11 0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	May 11, 2009 August 5, 2009 November 30, 2009 February 24, 2010 May 17, 2010 November 1, 2010 November 7, 2011 November 7, 2011 May 29, 2012 November 2, 2012 November 2, 2012 November 2, 2013 November 12, 2013	5.95 5.87 5.78 5.97 5.93 5.77 5.86 5.90 5.91 6.24	1074.93 1075.01 1075.10 1074.91 1074.95 1075.11 1075.02 1074.98	- - - - -	14.53 14.56 14.40 14.53 14.49 14.52 14.52	-0.03 -0.06 0.10 -0.03 0.01 -0.02	0.00 0.00 1.11 0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	August 5, 2009 November 30, 2009 February 24, 2010 May 17, 2010 November 1, 2010 May 9, 2011 November 7, 2011 May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	5.87 5.78 5.97 5.93 5.77 5.86 5.90 5.91 6.24	1075.01 1075.10 1074.91 1074.95 1075.11 1075.02 1074.98		14.56 14.40 14.53 14.49 14.52 14.52	-0.06 0.10 -0.03 0.01 -0.02	0.00 1.11 0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	November 30, 2009 February 24, 2010 May 17, 2010 Movember 1, 2010 May 9, 2011 November 7, 2011 May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	5.78 5.97 5.93 5.77 5.86 5.90 5.91 6.24	1075.10 1074.91 1074.95 1075.11 1075.02 1074.98	- - - -	14.40 14.53 14.49 14.52 14.52	0.10 -0.03 0.01 -0.02	1.11 0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	February 24, 2010 May 17, 2010 November 1, 2010 May 9, 2011 November 7, 2011 May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	5.97 5.93 5.77 5.86 5.90 5.91 6.24	1074.91 1074.95 1075.11 1075.02 1074.98	- - -	14.53 14.49 14.52 14.52	-0.03 0.01 -0.02	0.00 0.11 0.00
PMW-04	1080.88	14.50	9.0	November 1, 2010 May 9, 2011 November 7, 2011 May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	5.77 5.86 5.90 5.91 6.24	1075.11 1075.02 1074.98	-	14.52 14.52	-0.02	0.00
PMW-04	1080.88	14.50	9.0	May 9, 2011 November 7, 2011 May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	5.86 5.90 5.91 6.24	1075.02 1074.98	-	14.52		
PMW-04	1080.88	14.50	9.0	November 7, 2011 May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	5.90 5.91 6.24	1074.98				
PMW-04	1080.88	14.50	9.0	May 29, 2012 November 26, 2012 May 6, 2013 November 12, 2013	6.24	1074.97		14.53	-0.03	0.00
				May 6, 2013 November 12, 2013			-	14.55	-0.05	0.00
				November 12, 2013		1074.64	-	14.50	0.00	0.00
					5.96 5.92	1074.92 1074.96	-	14.49 14.70	-0.20	0.11
				May 27, 2014	5.85	1075.03	-	14.46	0.04	0.44
				November 17, 2014	5.32	1075.56	-	14.45	0.05	0.56
				May 19, 2015	5.70	1075.18	-	14.42	0.08	0.89
				November 16, 2015	6.01 5.96	1074.87 1074.92	-	14.45 14.47	0.05	0.56 0.33
				May 9, 2016 November 15, 2016	6.32	1074.56	-	14.47	0.02	0.33
				May 16, 2017	5.64	1075.24	-	14.45	0.05	0.56
·	Į.			November 6, 2017	5.82	1075.06	-	14.45	0.05	0.56
				May 14, 2018	5.85	1075.03	-	14.45	0.05	0.56
				November 12, 2018 April 21, 2008	5.74 5.02	1075.14 1074.70	-	14.47 16.09	0.03 -0.59	0.33
1				May 6, 2008	5.07	1074.65	-	16.09	-0.59	0.00
1				August 5, 2008	4.93	1074.79	-	16.08	-0.58	0.00
ı				November 10, 2008	5.02	1074.70	-	16.10	-0.60	0.00
ı				February 17, 2009 May 11, 2009	4.68 4.82	1075.04 1074.90	-	16.18 16.10	-0.68 -0.60	0.00
ı				August 5, 2009	4.71	1075.01	-	16.14	-0.64	0.00
ı				November 30, 2009	4.61	1075.11	-	16.04	-0.54	0.00
ı				February 24, 2010	4.83	1074.89	-	16.12	-0.62	0.00
ı				May 17, 2010 November 1, 2010	4.79 4.62	1074.93 1075.10	-	16.07 16.08	-0.57 -0.58	0.00
ı				May 9, 2011	4.72	1075.00	-	16.11	-0.61	0.00
ı				November 7, 2011	4.75	1074.97	-	16.12	-0.62	0.00
PMW-05	1079.79	15.50	7.0	May 29, 2012 November 26, 2012	4.77 5.09	1074.95 1074.63	-	16.14 16.10	-0.64 -0.60	0.00
ı				May 6, 2013	4.82	1074.90	-	16.10	-0.60	0.00
ı				November 12, 2013	4.78	1074.94	-	16.07	-0.57	0.00
ı				May 27, 2014	4.71	1075.01	-	16.09	-0.59	0.00
ı				November 17, 2014 May 19, 2015	4.14 4.52	1075.58 1075.27	-	16.08 16.06	-0.58 -0.56	0.00
ı				November 16, 2015	4.86	1074.93	-	16.06	-0.56	0.00
ı				May 9, 2016	4.82	1074.97	-	16.07	-0.57	0.00
ı				November 15, 2016	5.14	1074.65	-	16.06	-0.56	0.00
1				May 16, 2017 November 6, 2017	4.45	1075.34	-	16.08	-0.58	0.00
ı				May 14, 2018	4.75	1075.04	-	16.08	-0.58	0.00
				November 12, 2018	4.60	1075.19	-	16.08	-0.58	0.00
				April 21, 2008	5.65	1074.73	-	16.29	-0.05	0.00
				May 6, 2008 August 5, 2008	5.71 5.57	1074.67 1074.81	-	16.36 16.25	-0.12 -0.01	0.00
				November 10, 2008	5.65	1074.61	-	16.29	-0.05	0.00
				February 17, 2009	5.33	1075.05	-	16.23	0.01	0.14
				May 11, 2009	5.45 5.37	1074.93 1075.01	-	16.27	-0.03 0.09	0.00 1.29
				August 5, 2009 November 30, 2009	5.37	1075.01	-	16.15 16.05	0.09	2.71
				February 24, 2010	5.46	1074.92	-	15.95	0.29	4.14
				May 17, 2010	5.43	1074.95	-	15.84	0.40	5.71
				November 1, 2010 May 9, 2011	5.27 5.35	1075.11 1075.03	-	15.86 15.85	0.38	5.43 5.57
				November 7, 2011	5.39	1075.03	-	16.30	-0.06	0.00
PMW-06	1080.39	16.24	7.0	May 29, 2012	5.42	1074.96	-	16.29	-0.05	0.00
				November 26, 2012	5.73	1074.65	-	16.25	-0.01	0.00
				May 6, 2013 November 12, 2013	5.45 5.38	1074.93 1075.00	-	16.23 16.25	0.01 -0.01	0.14 0.00
				May 27, 2014	5.34	1075.04	-	16.23	0.01	0.14
				November 17, 2014	4.78	1075.60	-	14.52	1.72	24.57
				May 19, 2015	5.15	1075.24	-	16.18	0.06	0.86
				November 16, 2015	5.51 5.45	1074.88	-	16.19	0.05	0.71 0.14
				May 9, 2016 November 15, 2016	5.45	1074.94	-	16.23 16.18	0.01	0.14
				May 16, 2017	5.12	1074.33	-	16.18	0.06	0.86
				November 6, 2017	5.30	1075.09	-	16.18	0.06	0.86
				May 14, 2018 November 12, 2018	5.35 5.19	1075.04 1075.20	-	16.20 16.21	0.04	0.57 0.43

PAW-97 1079.93 23.00 1079.94 23.04 420 1079.64	Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	onta Former MGP Site	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
PMW-67 1079.50 23.04 24.0 1079.22					April 21, 2008	4.29	1075.64	-	22.26		
PMM-07 1078-59 1078-54 PARM-09 1078-54 PARM-09 1078-54 PARM-09 1078-54 PARM-09 1078-54 PARM-09 1078-55 PARM-09 1078-54 PARM-09 1078-55 PARM-09 1078-56 PARM								-			
PMA-07 1079.58 1079.54 PMA-17 1079.58 PMA-17 PMA-17 1079.58 PMA-17 1079.58 PMA-17 1079.58 PMA-17 1079.58 PMA-17					August 5, 2008	5.26	1074.67	-	22.18	1.42	35.50
PAM-07 1079.93 23.60 4.0											1
PMM-O7					,						
PARW OF 1079.54 23.04 4.0											
PMW-07 1078-93 28.90 4.0 PMW-07 1078-93 28.90 4.0 PMW-07 1078-93 28.90 4.0 Application of the company											
PMN-07 1078-93 23.60 4.9								-			
PMW-07 1079.53							1075.35	-	22.15	1.45	36.25
PMM-49								-			
PARN-CP											1
November 12, 2019 5.56	DMM 07	4070.00	22.00	4.0							
May 6, 2013	PIVIVV-U7	1079.93	23.00	4.0							1
May 27, 2014 4, 407 1075-86 23.35 0.25 6.25											
November 17, 2014 5.10 1074 83 . 23.28 0.32 8.00					November 12, 2013	5.48	1074.45	-	23.49	0.11	2.75
May 19, 2015 4.97 1074.96 . 22.28 0.32 8.00								-			
November 16, 2016 4.84 1075-09 . 23.33 0.27 0.75											
New York								1			1
November 15, 2016 5.99 1073 97 . 23.21 0.38 9.75											
May 16, 2017 4.05 1075,88 - 23,00 0.40 10.00											1
November 1, 2017											1
May 14, 2018 4.40 1075.53 - 23.00 0.40 10.00					-	-	-		-		-
November 12, 2016						4.40	1075.53		23.20	0.40	10.00
May 1, 2008					November 12, 2018	4.44	1075.49	-	23.20	0.40	10.00
August 5,0098 5,098 1074.46 - 23.02 0.02 0.00											
November 10, 2008 5.48 1074.09 - 23.12 -0.08 0.00											
February 17, 2009 4,59 1074.99 - 23.02 0.02 0.50					-						
May 11, 2009											1
PMW-08											1
February 24, 2010 5,15 1074,39 - 23.09 -0.05 0.00 May 17, 2010 4.83 1074,91 - 23.05 -0.01 0.00 November 1, 2010 4.34 1075,00 - 23.07 -0.03 0.00 0.00 May 17, 2011 4.65 1074,69 - 23.10 -0.06 0.00 0.00 November 17, 2011 4.65 1074,89 - 23.13 -0.09 0.00 0.00 November 17, 2011 4.65 1074,89 - 23.13 -0.09 0.00 0.00 November 12, 2013 5,24 1074,30 - 23.09 -0.05 0.00 0.00 November 12, 2013 5,24 1074,30 - 23.05 -0.01 0.00 November 12, 2013 5,24 1074,30 - 23.05 -0.01 0.00 November 12, 2013 5,24 1074,30 - 23.05 0.00 1 0.00 November 12, 2015 4,94 1074,40 - 23.09 -0.05 0.00 November 12, 2015 4,94 1074,40 - 23.09 0.00 1 0.00 November 15, 2016 4.96 1074,58 - 23.05 0.01 0.00 November 15, 2016 5,78 1074,58 - 23.05 0.01 0.00 November 15, 2016 5,78 1074,58 - 23.05 0.01 0.00 November 15, 2016 5,78 1074,58 - 23.05 0.01 0.00 November 12, 2018 4.41 1075,13 - 23.07 0.03 0.00 November 12, 2018 4.41 1075,13 - 23.07 0.03 0.00 November 12, 2018 4.41 1075,13 - 23.07 0.03 0.00 November 12, 2018 4.41 1075,13 - 23.07 0.03 0.00 November 12, 2018 4.41 1075,13 - 23.07 0.03 0.00 November 12, 2018 4.41 1075,13 - 23.07 0.03 0.00 November 10, 2008 5,45 1074,73 - 144,45 0.00 0.00 November 10, 2008 5,45 1074,73 - 144,45 0.00 0.00 November 10, 2008 5,45 1074,73 - 144,44 0.01 0.00 0.00 November 10, 2008 5,45 1074,73 - 144,41 0.00 0.00 November 10, 2008 5,45 1074,73 - 144,41 0.00 0.00 November 30, 2009 5,16 1075,04 - 144,45 0.00 0.00 November 30, 2009 5,16 1075,04 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,04 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,04 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,04 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,03 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,03 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,03 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,03 - 144,45 0.00 0.00 0.00 November 30, 2009 5,16 1075,03 - 144,45 0.00 0.00 0.00 November 10, 2018 5,20 1074,98 - 144,41 0.00 0.00 0.00 November 10, 2018 5,20 1074,98 - 144,41 0.00 0.00 0.00 November 10, 2018 5,20 1074,98											
PMW-08 1079.54 23.04 4.0 May 17. 2010					November 30, 2009	4.85	1074.69	-	22.99	0.05	1.25
PMW-08 1079.54 23.04 4.0 November 1, 2010 4.34 1075.20 23.07 -0.03 0.00 May 92, 2011 4.65 1074.89 - 23.10 -0.06 0.00 May 29, 2012 4.65 1074.89 - 23.10 -0.06 0.00 May 62, 2013 4.65 1074.89 - 23.10 -0.06 0.00 May 62, 2013 4.62 1074.89 - 23.10 -0.06 0.00 May 62, 2013 4.62 1074.89 - 23.10 -0.06 0.00 May 62, 2013 4.62 1074.89 - 23.09 -0.05 0.00 May 62, 2013 4.62 1074.89 - 23.09 -0.05 0.00 May 62, 2013 4.62 1074.80 - 23.09 -0.05 0.00 May 77, 2014 4.30 1075.24 - 23.00 -0.00 0.00 May 77, 2014 4.30 1075.24 - 23.05 -0.01 0.00 May 19, 2015 4.94 1074.60 - 23.03 0.01 0.25 May 19, 2016 4.96 1074.82 - 23.05 -0.01 0.00 May 9, 2016 4.96 1074.82 - 23.05 -0.01 0.00 May 9, 2016 4.96 1074.88 - 23.05 -0.01 0.00 May 19, 2016 5.78 1073.76 - 23.05 -0.01 0.00 May 19, 2016 5.78 1073.76 - 23.07 -0.03 0.00 November 15, 2016 5.78 1073.76 - 23.07 -0.03 0.00 November 12, 2018 4.41 1075.13 - 23.07 -0.03 0.00 November 12, 2018 4.41 1075.13 - 23.07 -0.03 0.00 May 6, 2008 5.51 1074.67 - 14.47 -0.04 0.00 May 6, 2008 5.56 1074.73 - 14.44 -0.01 0.00 May 19, 2016 5.25 1074.83 - 14.44 -0.01 0.00 May 19, 2016 5.25 1074.83 - 14.44 -0.01 0.00 May 19, 2017 5.16 1075.09 - 14.35 0.08 0.94 PMW-09 1080.18 14.43 8.5 1074.97 - 14.44 -0.01 0.00 May 29, 2011 5.16 1075.00 - 14.45 -0.002 0.00 May 29, 2011 5.16 1075.00 - 14.45 -0.002 0.00 May 29, 2011 5.16 1075.00 - 14.45 -0.002 0.00 May 29, 2011 5.16 1075.00 - 14.45 -0.002 0.00 May 19, 2015 5.10 1074.87 - 14.40 0.00 0.12 May 19, 2016 5.30 1074.88 - 14.44 0.01 0.00 0.12 May 19, 2015 5.01 1074.85 - 14.42 0.01 0.12 May 19, 2016 5.30 1074.88 - 14.44 0.01 0.02 0.04 May 19, 2016 5.30 1074.88 - 14.44 0					February 24, 2010		1074.39	-	23.09	-0.05	0.00
PMW-08											1
PMW-08 PMW-08 PMW-08 PMW-08 PMW-08 PMW-08 PMW-09 PM											
PMW-08											
November 16, 2012 5.38 1074.16 . 23.09 .0.05 0.00	PMW-08	1079 54	23.04	4.0							
November 12, 2013 5.24 1074.30 - 23.05 -0.01 0.00	1 10100-00	1073.04	20.04	4.0				-			
May 27, 2014					May 6, 2013	4.62	1074.92	-	23.10	-0.06	0.00
November 17, 2014 5.02 1074.52 - 23.06 -0.02 0.00								-			
May 19, 2015					-						
November 16, 2015 4.72 1074.82 - 23.05 -0.01 0.00											
May 9, 2016					-						
November 15, 2016 5.78 1073.76 - 23.05 -0.01 0.00 May 16, 2017								1			1
May 16, 2017					-						
May 14, 2018 5.50 1074.04 - 23.07 -0.03 0.00 November 12, 2018 4.41 1075.13 - 23.07 -0.03 0.00 April 21, 2008 5.45 1074.73 - 14.45 -0.02 0.00 May 6, 2008 5.51 1074.67 - 14.47 -0.04 0.00 August 5, 2008 5.36 1074.82 - 14.41 0.02 0.24 November 10, 2009 5.14 1075.04 - 14.44 -0.01 0.00 February 17, 2009 5.14 1075.04 - 14.44 -0.01 0.00 August 5, 2009 5.95 1074.93 - 14.44 -0.01 0.00 November 30, 2009 5.09 1075.09 - 14.35 0.08 0.94 February 24, 2010 5.27 1074.91 - 14.45 -0.02 0.00 May 17, 2010 5.27 1074.91 - 14.45 -0.02 0.00 May 17, 2010 5.16 1075.02 - 14.41 0.02 0.24 November 12, 2010 5.08 1075.10 - 14.45 -0.02 0.00 May 9, 2011 5.16 1075.02 - 14.42 0.01 0.12 November 26, 2012 5.54 1074.97 - 14.45 -0.02 0.00 May 9, 2010 5.90 1074.98 - 14.46 -0.03 0.00 May 9, 2010 5.16 1075.02 - 14.44 -0.01 0.00 November 12, 2013 5.26 1074.92 - 14.44 -0.01 0.00 November 12, 2013 5.26 1074.92 - 14.44 -0.01 0.00 November 17, 2014 4.60 1075.58 - 14.42 0.01 0.12 May 19, 2016 5.30 1074.88 - 14.42 0.01 0.12 May 19, 2016 5.30 1074.88 - 14.42 0.01 0.12 May 16, 2017 5.12 1075.04 - 14.42 0.01 0.12 May 16, 2017 5.12 1075.04 - 14.42 0.01 0.12 May 16, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 16, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12								-			1
PMW-09 1080.18 14.43					-			-			-
PMW-09 1080.18 14.43 8.5								-			
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PMW-09 1080.18 14.43											
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PMW-09 PM					August 0, 2000	0.00	1074.02			0.02	U.E.
PMW-09 1080.18											
PMW-09 PMW-09 1080.18 14.43 8.5							1074.93	-			0.00
PMW-09 1080.18 14.43 February 24, 2010 5.27 1074.91 - 14.45 -0.02 0.00 May 17, 2010 5.21 1074.97 - 14.41 0.02 0.24 November 1, 2010 5.08 1075.10 - 14.45 -0.02 0.00 May 9, 2011 5.16 1075.02 - 14.42 0.01 0.12 November 7, 2011 5.20 1074.98 - 14.46 -0.03 0.00 May 9, 2012 5.21 1074.97 - 14.47 -0.04 0.00 November 26, 2012 5.54 1074.64 - 14.45 -0.02 0.00 November 12, 2013 5.26 1074.92 - 14.44 -0.01 0.00 November 12, 2013 5.20 1074.98 - 14.44 -0.01 0.00 November 12, 2013 5.20 1074.98 - 14.44 -0.01 0.00 November 17, 2014 4.60 1075.03 - 14.45 -0.02 0.00 November 17, 2014 4.60 1075.58 - 14.42 0.01 0.12 May 19, 2015 5.31 1074.87 - 14.40 0.03 0.35 November 16, 2015 5.31 1074.87 - 14.42 0.01 0.12 May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.88 - 14.41 0.02 0.24 November 16, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
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PMW-09 1080.18 14.43 8.5 May 9, 2011 5.16 1075.02 - 14.42 0.01 0.01 0.12 November 7, 2011 5.20 1074.98 - 14.45 - 0.02 0.00 November 12, 2012 5.54 1074.97 - 14.47 - 0.04 0.00 0.00 November 12, 2013 5.26 1074.92 - 14.44 - 0.01 0.02 0.00 November 12, 2013 5.20 1074.98 - 14.45 - 0.02 0.00 November 12, 2013 5.20 1074.98 - 14.45 - 0.02 0.00 November 12, 2013 5.20 1075.03 - 14.45 - 0.02 0.00 November 17, 2014 4.60 1075.03 - 14.45 0.01 0.12 May 19, 2015 5.01 1075.17 - 14.40 0.03 0.35 November 16, 2015 5.31 1074.87 - 14.42 0.01 0.12 May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.88 - 14.42 0.01 0.12 May 16, 2017 November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
PMW-09 1080.18 14.43 8.5 November 7, 2011 5.20 1074.98 - 14.46 -0.03 0.00 May 29, 2012 5.21 1074.97 - 14.47 -0.04 0.00 November 66, 2012 5.54 1074.64 - 14.45 -0.02 0.00 May 6, 2013 5.26 1074.92 - 14.44 -0.01 0.00 November 12, 2013 5.20 1074.98 - 14.41 0.02 0.24 May 27, 2014 5.15 1075.03 - 14.45 -0.02 0.00 November 17, 2014 4.60 1075.58 - 14.42 0.01 0.12 May 19, 2015 5.01 1075.17 - 14.40 0.03 0.35 November 16, 2015 5.31 1074.87 - 14.42 0.01 0.12 May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.88 - 14.42 0.01 0.12 May 16, 2017 4.94 1075.24 - 14.42 0.01 0.12 November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
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November 12, 2013 5.20 1074.98 - 14.41 0.02 0.24 May 27, 2014 5.15 1075.03 - 14.45 -0.02 0.00 November 17, 2014 4.60 1075.58 - 14.42 0.01 0.12 May 19, 2015 5.01 1075.17 - 14.40 0.03 0.35 November 16, 2015 5.31 1074.87 - 14.42 0.01 0.12 May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.58 - 14.42 0.01 0.12 May 16, 2017 4.94 1075.24 - 14.42 0.01 0.12 November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
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May 19, 2015 5.01 1075.17 - 14.40 0.03 0.35 November 16, 2015 5.31 1074.87 - 14.42 0.01 0.12 May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.58 - 14.42 0.01 0.12 May 16, 2017 4.94 1075.24 - 14.42 0.01 0.12 November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
November 16, 2015 5.31 1074.87 - 14.42 0.01 0.12 May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.58 - 14.42 0.01 0.12 May 16, 2017 4.94 1075.24 - 14.42 0.01 0.12 November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
May 9, 2016 5.30 1074.88 - 14.41 0.02 0.24 November 15, 2016 5.60 1074.58 - 14.42 0.01 0.12 May 16, 2017 4.94 1075.24 - 14.42 0.01 0.12 November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
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November 6, 2017 5.12 1075.06 - 14.42 0.01 0.12 May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12								-			
May 14, 2018 5.16 1075.02 - 14.42 0.01 0.12											
											1
November 12, 2018 5.04 1075.14 - 14.41 0.02 0.24					-						

Well ID	Measuring Point	Actual Depth to	Screen Length	Date	Depth to Water	Groundwater Elevation	Depth to	Depth to Bottom	Accumulated Thickness of Sediments	Percent Screen Occluded By Sediments
	Elevation	Bottom	<u> </u>		(feet TOC)		(feet TOC)	(feet TOC)	(feet)	(%)
				April 21, 2008	5.52	1074.73	-	14.72	-0.02	0.00
				May 6, 2008 August 5, 2008	5.55 5.44	1074.70 1074.81	-	14.70 14.68	0.00	0.00 0.24
				November 10, 2008	5.51	1074.74	-	14.74	-0.04	0.00
				February 17, 2009	5.23	1075.02	-	14.67	0.03	0.35
				May 11, 2009	5.33	1074.92	-	14.70	0.00	0.00
				August 5, 2009	5.23 5.14	1075.02 1075.11	-	14.76 14.63	-0.06 0.07	0.00 0.82
				November 30, 2009 February 24, 2010	5.33	1073.11	-	14.03	-0.03	0.00
				May 17, 2010	5.30	1074.95	-	14.96	-0.26	0.00
				November 1, 2010	5.14	1075.11	-	14.72	-0.02	0.00
				May 9, 2011	5.23	1075.02	-	14.72	-0.02	0.00
				November 7, 2011 May 29, 2012	5.26 5.29	1074.99 1074.96	-	14.75 14.71	-0.05 -0.01	0.00
PMW-10	1080.25	14.70	8.5	November 26, 2012	5.60	1074.95	-	14.71	-0.02	0.00
				May 6, 2013	5.33	1074.92	-	14.71	-0.01	0.00
				November 12, 2013	5.28	1074.97	-	14.66	0.04	0.47
				May 27, 2014	5.22	1075.03	-	14.75	-0.05	0.00
				November 17, 2014	4.68	1075.57	-	14.70	0.00	0.00
				May 19, 2015	5.06 5.38	1075.19 1074.87	-	14.66 14.69	0.04	0.47 0.12
				November 16, 2015 May 9, 2016	5.32	1074.87	-	14.68	0.02	0.12
				November 15, 2016	5.66	1074.93	-	14.70	0.02	0.00
				May 16, 2017	5.02	1075.23	-	14.68	0.02	0.24
				November 6, 2017	5.18	1075.07	-	14.70	0.00	0.00
				May 14, 2018	5.25	1075.00	-	14.70	0.00	0.00
				November 12, 2018	5.09	1075.16	-	14.69	0.01	0.12
				April 21, 2008 May 6, 2008	5.52 5.56	1074.73 1074.69	-	14.68 14.65	-0.03 0.00	0.00
				August 5, 2008	5.45	1074.89	-	14.63	0.00	0.13
				November 10, 2008	5.53	1074.72	-	14.65	0.00	0.00
				February 17, 2009	5.22	1075.03	-	14.63	0.02	0.27
				May 11, 2009	5.33	1074.92	-	14.65	0.00	0.00
				August 5, 2009 November 30, 2009	5.25 5.16	1075.00 1075.09	-	14.71 14.58	-0.06 0.07	0.00
				February 24, 2010	5.32	1075.09	-	14.58	-0.02	0.93
				May 17, 2010	5.31	1074.94	-	14.64	0.01	0.13
				November 1, 2010	3.13	1077.12	-	14.69	-0.04	0.00
				May 9, 2011	5.24	1075.01	-	14.67	-0.02	0.00
				November 7, 2011	5.27	1074.98	-	14.70	-0.05	0.00
PMW-11	1080.25	14.65	7.5	May 29, 2012 November 26, 2012	5.30 5.60	1074.95 1074.65	-	14.67 14.69	-0.02 -0.04	0.00
				May 6, 2013	5.33	1074.92	-	14.64	0.01	0.13
				November 12, 2013	5.29	1074.96	-	14.62	0.03	0.40
				May 27, 2014	5.22	1075.03	-	14.69	-0.04	0.00
				November 17, 2014	4.67	1075.58	-	14.65	0.00	0.00
				May 19, 2015	5.03	1075.22	-	14.61	0.04	0.53
				November 16, 2015 May 9, 2016	5.39 5.43	1074.86 1074.82	-	14.65 14.65	0.00	0.00
				November 15, 2016	5.67	1074.58	-	14.65	0.00	0.00
				May 16, 2017	5.02	1075.23	-	14.64	0.01	0.13
				November 6, 2017	5.20	1075.05	-	14.63	0.02	0.27
				May 14, 2018	5.25	1075.00	-	14.65	0.00	0.00
-				November 12, 2018	5.12	1075.13	-	14.64	0.01	0.13
				April 21, 2008 May 6, 2008	5.61 5.66	1074.73 1074.68	-	16.43 16.34	-1.23 -1.14	0.00
				August 5, 2008	5.50	1074.84	-	16.31	-1.11	0.00
				November 10, 2008	5.60	1074.74	-	16.30	-1.10	0.00
				February 17, 2009	5.30	1075.04	-	16.30	-1.10	0.00
				May 11, 2009	5.41	1074.93	-	16.20	-1.00	0.00
				August 5, 2009 November 30, 2009	5.33 5.22	1075.01 1075.12	-	16.36 16.24	-1.16 -1.04	0.00
				February 24, 2010	5.42	1073.12	-	16.23	-1.03	0.00
				May 17, 2010	5.38	1074.96	-	16.31	-1.11	0.00
				November 1, 2010	5.21	1075.13	-	16.21	-1.01	0.00
				May 9, 2011	5.31	1075.03	-	16.22	-1.02	0.00
PMW-12	1080.34	15.20	7.0	November 7, 2011 May 29, 2012	5.34 5.37	1075.00 1074.97	-	16.32 16.37	-1.12 -1.17	0.00
FIVIVV-12	1000.34	15.∠0	7.0	November 26, 2012	5.69	1074.97	-	16.31	-1.17	0.00
				May 6, 2013	5.41	1074.93	-	16.31	-1.11	0.00
				November 12, 2013	5.35	1074.99	-	16.35	-1.15	0.00
				May 27, 2014	5.30	1075.04	-	16.32	-1.12	0.00
				November 17, 2014	4.73	1075.61	-	16.25	-1.05	0.00
				May 19, 2015 November 16, 2015	5.10 5.45	1075.24 1074.89	-	16.26 16.25	-1.06 -1.05	0.00
				May 9, 2016	5.41	1074.89	-	16.28	-1.08	0.00
				November 15, 2016	5.75	1074.59	-	16.31	-1.11	0.00
				May 16, 2017	5.08	1075.26	-	16.25	-1.05	0.00
				November 6, 2017	5.21	1075.13	-	16.25	-1.05	0.00
				May 14, 2018	5.30	1075.04	-	16.25	-1.05	0.00
i l				November 12, 2018	5.19	1075.15	-	16.27	-1.07	0.00

April 21, 2008 5.45 1074.71 - 16.13 May 6, 2008 5.48 1074.68 - 16.13 August 5, 2008 5.34 1074.82 - 16.10 November 10, 2008 5.41 1074.75 - 16.15 February 17, 2009 5.10 1075.06 - 16.07 May 11, 2009 5.22 1074.94 - 16.12 August 5, 2009 5.14 1075.02 - 16.15 November 30, 2009 5.03 1075.13 - 16.04 February 24, 2010 5.24 1074.92 - 16.12	-0.60 -0.60 -0.57 -0.62 -0.54 -0.59 -0.62	0.00 0.00 0.00 0.00 0.00
August 5, 2008 5.34 1074.82 - 16.10 November 10, 2008 5.41 1074.75 - 16.15 February 17, 2009 5.10 1075.06 - 16.07 May 11, 2009 5.22 1074.94 - 16.12 August 5, 2009 5.14 1075.02 - 16.15 November 30, 2009 5.03 1075.13 - 16.04	-0.57 -0.62 -0.54 -0.59 -0.62	0.00
November 10, 2008 5.41 1074.75 - 16.15 February 17, 2009 5.10 1075.06 - 16.07 May 11, 2009 5.22 1074.94 - 16.12 August 5, 2009 5.14 1075.02 - 16.15 November 30, 2009 5.03 1075.13 - 16.04	-0.62 -0.54 -0.59 -0.62	
February 17, 2009 5.10 1075.06 - 16.07 May 11, 2009 5.22 1074.94 - 16.12 August 5, 2009 5.14 1075.02 - 16.15 November 30, 2009 5.03 1075.13 - 16.04	-0.54 -0.59 -0.62	0.00
August 5, 2009 5.14 1075.02 - 16.15 November 30, 2009 5.03 1075.13 - 16.04	-0.62	0.00
November 30, 2009 5.03 1075.13 - 16.04		0.00
		0.00
	-0.51 -0.59	0.00
May 17, 2010 5.20 1074.96 - 16.08	-0.55	0.00
November 1, 2010 5.04 1075.12 - 16.13	-0.60	0.00
May 9, 2011 5.13 1075.03 - 16.12	-0.59	0.00
November 7, 2011 5.18 1074.98 - 16.16	-0.63	0.00
PMW-13 1080.16 15.53 6.5 May 29, 2012 5.20 1074.96 - 16.16 November 26, 2012 5.52 1074.64 - 16.13	-0.63 -0.60	0.00
May 6, 2013 5.23 1074.93 - 16.13	-0.60	0.00
November 12, 2013 5.18 1074.98 - 16.08	-0.55	0.00
May 27, 2014 5.12 1075.04 - 16.14	-0.61	0.00
November 17, 2014 4.57 1075.59 - 16.10	-0.57	0.00
May 19, 2015 4.92 1075.24 - 16.09	-0.56	0.00
November 16, 2015 5.22 1074.94 - 16.09 May 9, 2016 5.23 1074.93 - 16.10	-0.56 -0.57	0.00
November 15, 2016 5.51 1074.65 - 16.10	-0.57	0.00
May 16, 2017 4.89 1075.27 - 16.10	-0.57	0.00
November 6, 2017 5.03 1075.13 - 16.09	-0.56	0.00
May 14, 2018 5.15 1075.01 - 16.10	-0.57	0.00
November 12, 2018	-0.56	0.00
April 21, 2008 5.30 1074.73 - 15.96 May 6, 2008 5.34 1074.69 - 15.96	-0.06 -0.06	0.00
August 5, 2008 5.22 1074.81 - 15.92	-0.02	0.00
November 10, 2008 5.29 1074.74 - 16.03	-0.13	0.00
February 17, 2009 4.97 1075.06 - 15.90	0.00	0.00
May 11, 2009 5.10 1074.93 - 15.94	-0.04	0.00
August 5, 2009 5.01 1075.02 - 15.99 November 30, 2009 4.88 1075.15 - 15.87	-0.09 0.03	0.00
February 24, 2010 5.11 1074.92 - 15.96	-0.06	0.00
May 17, 2010 5.09 1074.94 - 15.91	-0.01	0.00
November 1, 2010 4.88 1075.15 - 15.96	-0.06	0.00
May 9, 2011 4.99 1075.04 - 15.96	-0.06	0.00
PMW-14 1080.03 15.90 6.0 May 29, 2012 5.08 1074.95 - 15.98	-0.07 -0.08	0.00
November 26, 2012 5.37 1074.66 - 15.95	-0.05	0.00
May 6, 2013 5.09 1074.94 - 15.95	-0.05	0.00
November 12, 2013 5.03 1075.00 - 15.91	-0.01	0.00
May 27, 2014 4.92 1075.11 - 15.96	-0.06	0.00
November 17, 2014 4.47 1075.56 - 15.92 May 19, 2015 4.78 1075.25 - 15.90	-0.02	0.00
November 16, 2015 5.14 1074.89 - 15.92	-0.02	0.00
May 9, 2016 5.08 1074.95 - 15.91	-0.01	0.00
November 15, 2016 5.42 1074.61 - 15.92	-0.02	0.00
May 16, 2017 4.74 1075.29 - 15.91	-0.01	0.00
November 6, 2017	0.00 -0.01	0.00
May 14, 2018 5.05 1074.98 - 15.91 November 12, 2018 4.86 1075.17 - 15.91	-0.01	0.00
April 21, 2008 4.41 1074.68 - 18.42	-0.06	0.00
May 6, 2008	-	-
August 5, 2008 5.29 1073.80 - 18.44	-0.08	0.00
November 10, 2008 5.52 1073.57 - 18.42	-0.06	0.00
February 17, 2009 4.51 1074.58 - 18.44	-0.08 -0.08	0.00
August 5, 2009	-	-
November 30, 2009 4.95 1074.14 - 18.33	0.03	0.00
February 24, 2010	-	-
May 17, 2010 4.73 1074.36 - 18.39	-0.03	0.00
November 1, 2010 4.28 1074.81 - 18.41	-0.05 -0.07	0.00
November 7, 2011 4.79 1074.30 - 18.45	-0.09	0.00
NRW-01* 1079.09 18.36 13.0 May 29, 2012 4.73 1074.36 - 18.44	-0.08	0.00
November 26, 2012 5.48 1073.61 - 18.43	-0.07	0.00
May 6, 2013 4.68 1074.41 - 18.45	-0.09	0.00
November 12, 2013 5.43 1073.66 - 18.35	0.01 -0.08	0.00
November 17, 2014 4.72 1074.37 - 18.40	-0.04	0.00
May 19, 2015 4.86 1074.23 - 18.39	-0.03	0.00
November 16, 2015 4.74 1074.35 - 18.42	-0.06	0.00
May 9, 2016 5.09 1074.00 - 18.38	-0.02	0.00
November 15, 2016 6.01 1073.08 - 18.40	-0.04	0.00
May 16, 2017 3.85 1075.24 - 18.41 November 6, 2017 5.30 1073.79 - 18.40	-0.05 -0.04	0.00
May 14, 2018 4.54 1074.55 - 18.40	-0.04	0.00
November 12, 2018 4.43 1074.66 - 18.38	-0.02	0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	4.78	1074.72	-	13.34	-0.04	0.00
				May 6, 2008	5.68	1072.02	-	13.25	0.05	0.00
				August 5, 2008 November 10, 2008	5.92	1073.82 1073.58	-	13.25	-0.05	0.00
				February 17, 2009	4.90	1074.60	-	13.28	0.02	0.00
				May 11, 2009	5.40	1074.10	-	13.25	0.05	0.00
				August 5, 2009	5.35	1074.15	-	13.12	0.18	0.00
				November 30, 2009 February 24, 2010	-	1074.15	-	- 13.12	-	-
				May 17, 2010	5.10	1074.40	-	13.19	0.11	0.00
				November 1, 2010	4.46	1075.04	-	13.35	-0.05	0.00
				May 9, 2011 November 7, 2011	4.32 5.18	1075.18 1074.32	-	13.35 13.24	-0.05 0.06	0.00
NRW-02*	1079.40	13.20	8.0	May 29, 2012	5.14	1074.32	-	13.24	0.00	0.00
"""	1010.10	10.20	0.0	November 26, 2012	5.87	1073.63	-	13.35	-0.05	0.00
				May 6, 2013	5.05	1074.45	-	13.26	0.04	0.00
				November 12, 2013 May 27, 2014	5.85 4.74	1073.65 1074.76	-	13.29 13.25	0.01	0.00
				November 17, 2014	5.27	1074.23	-	13.37	-0.07	0.00
				May 19, 2015	5.31	1074.19	-	13.21	0.09	0.00
				November 16, 2015	5.20	1074.30	-	13.28	0.02	0.00
				May 9, 2016	5.43	1073.97	-	13.18	0.02	0.00
				November 15, 2016 May 16, 2017	6.35 4.22	1073.05 1075.18	-	13.13 13.20	0.07	0.00
	1			November 6, 2017	5.61	1073.79	-	13.14	0.06	0.00
	1			May 14, 2018	4.95	1074.45	-	13.20	0.00	0.00
				November 12, 2018	4.82	1074.58	-	13.24	-0.04	0.00
				April 21, 2008	4.67	1075.59	-	17.68	-0.01	0.00
				May 6, 2008 August 5, 2008	5.89	1074.37	-	17.71	-0.04	0.00
				November 10, 2008	6.18	1074.08	-	17.74	-0.07	0.00
				February 17, 2009	5.30	1074.96	-	17.74	-0.07	0.00
				May 11, 2009	5.46	1074.80	-	17.72	-0.05	0.00
				August 5, 2009 November 30, 2009	- 5.56	1074.70	-	17.72	-0.05	0.00
				February 24, 2010	-	-	-	-	-	-
				May 17, 2010	5.06	1075.20	-	17.70	-0.03	0.00
				November 1, 2010	4.76	1075.50	-	17.73	-0.06	0.00
				May 9, 2011 November 7, 2011	4.14 5.25	1076.12 1075.01	-	17.78 17.78	-0.11 -0.11	0.00
NRW-03*	1080.26	17.67	18.0	May 29, 2012	5.25	1075.01	-	17.79	-0.12	0.00
				November 26, 2012	6.22	1074.04	-	17.78	-0.11	0.00
				May 6, 2013	5.21	1075.05	-	17.79	-0.12	0.00
				November 12, 2013 May 27, 2014	6.18 4.79	1074.08 1075.47	-	17.73 17.84	-0.06 -0.17	0.00
				November 17, 2014	6.25	1074.01	-	17.80	-0.13	0.00
				May 19, 2015	6.09	1074.17	-	17.85	-0.18	0.00
				November 16, 2015	5.45	1074.81	-	17.90	-0.23	0.00
				May 9, 2016	5.84 6.92	1074.42 1073.34	-	17.89 17.90	-0.22 -0.23	0.00
				November 15, 2016 May 16, 2017	4.90	1075.36	-	17.96	-0.29	0.00
				November 6, 2017	6.59	1073.67	-	17.92	-0.25	0.00
				May 14, 2018	5.35	1074.91	-	17.97	-0.30	0.00
				November 12, 2018	5.14	1075.12	-	17.95	-0.28	0.00
				April 21, 2008 May 6, 2008	4.94	1075.61	-	22.29	0.31	0.00
	1			August 5, 2008	6.15	1074.40	-	22.24	0.36	0.00
	1			November 10, 2008	6.44	1074.11	-	22.38	0.22	0.00
				February 17, 2009 May 11, 2009	5.31 5.72	1075.24 1074.83	-	22.38 22.23	0.22	0.00
				August 5, 2009	5.72	1074.83	-	- 22.23	-	- 0.00
				November 30, 2009	5.81	1074.74	-	22.22	0.38	0.00
				February 24, 2010	-	-	-	-	-	-
	1			May 17, 2010 November 1, 2010	5.28 4.98	1075.27 1075.57	-	22.12 22.09	0.48	0.00
	1			May 9, 2011	4.98	1075.57	-	22.09	0.51	0.00
				November 7, 2011	5.44	1075.11	-	22.05	0.55	0.00
NRW-04*	NRW-04* 1080.55	22.60	18.0	May 29, 2012	5.43	1075.12	-	22.12	0.48	0.00
				November 26, 2012 May 6, 2013	6.40 5.39	1074.15 1075.16	-	22.10 22.10	0.50	0.00
				November 12, 2013	6.38	1075.16	-	22.10	0.09	0.00
				May 27, 2014	4.90	1075.65	-	22.13	0.47	0.00
				November 17, 2014	6.35	1074.20	-	22.11	0.49	0.00
		i	1	May 19, 2015	6.13 5.51	1074.42 1075.04	-	22.64 22.54	-0.04 0.06	0.00
							-		UUb	0.00
				November 16, 2015 May 9, 2016						
				May 9, 2016 November 15, 2016	5.92 6.87	1074.63 1073.68	-	22.65	-0.05 0.05	0.00
				May 9, 2016 November 15, 2016 May 16, 2017	5.92	1074.63 1073.68 1075.61	-	22.65 22.55 22.68	-0.05	0.00 0.00 0.00
				May 9, 2016 November 15, 2016	5.92 6.87	1074.63 1073.68	-	22.65 22.55	-0.05 0.05	0.00 0.00

Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Thickness of Sediments (feet)	Percent Screen Occluded By Sediments (%)
				April 21, 2008	NA	NA	-	NA	-	-
				May 6, 2008	NA NA	NA	-	NA NA	-	-
				August 5, 2008 November 10, 2008	NA NA	NA NA	-	NA NA	-	-
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	6.11	1074.65	-	20.03	0.71	0.00
				August 5, 2009	-	-	-	-		-
				November 30, 2009	6.22	1074.54	-	20.15	0.59	0.00
				February 24, 2010 May 17, 2010	5.59	1075.17	-	20.22	0.52	0.00
				November 1, 2010	5.18	1075.58	-	20.25	0.49	0.00
				May 9, 2011	4.37	1076.39	-	20.27	0.47	0.00
				November 7, 2011	5.80	1074.96	-	20.30	0.44	0.00
NRW-05*	1080.76	20.74	14.0	May 29, 2012	5.78	1074.98	-	20.27	0.47	0.00
				November 26, 2012	6.91	1073.85	-	20.30	0.44	0.00
				May 6, 2013 November 12, 2013	5.68 6.87	1075.08 1073.89	-	20.26 20.22	0.48	0.00
				May 27, 2014	5.08	1075.68	-	20.28	0.46	0.00
				November 17, 2014	5.48	1075.28	-	20.24	0.50	0.00
				May 19, 2015	6.60	1074.16	-	20.65	0.09	0.00
				November 16, 2015	5.77	1074.99	-	20.64	0.10	0.00
				May 9, 2016	6.28	1074.48	-	20.65	0.09	0.00
				November 15, 2016	7.59	1073.17	-	20.67	0.07	0.00
				May 16, 2017	5.07	1075.69	-	20.68	0.06	0.00
				November 6, 2017	7.20	1073.56	-	20.68	0.06	0.00
				May 14, 2018 November 12, 2018	5.61 5.39	1075.15 1075.37	-	20.68 20.66	0.06	0.00
				April 21, 2008	3.57	1075.16	-	14.89	0.11	1.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008	-		-	-	-	-
				November 10, 2008	5.36	1073.37	-	14.93	0.07	0.64
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	4.62	1074.11	-	14.88	0.12	1.09
				August 5, 2009	4.74	- 4074.00	-	- 44.00	- 0.40	- 4.00
				November 30, 2009 February 24, 2010	4.71 5.22	1074.02 1073.51	-	14.88 14.87	0.12	1.09 1.18
				May 17, 2010	4.21	1074.52	-	14.78	0.22	2.00
				November 1, 2010	3.71	1075.02	-	14.86	0.14	1.27
				May 9, 2011	2.96	1075.77	-	14.81	0.19	1.73
				November 7, 2011	4.25	1074.48	-	14.88	0.12	1.09
PZ-0801	1078.90	15.00	11.0	May 29, 2012	4.04	1074.69	-	14.88	0.12	1.09
				November 26, 2012	5.24	1073.49	-	14.83	0.17	1.55
				May 6, 2013 November 12, 2013	3.95 5.21	1074.78 1073.52	-	14.81 14.78	0.19	1.73 2.00
				May 27, 2014	3.57	1075.16	-	14.78	0.17	1.55
				November 17, 2014	-	-	-	-	-	-
				May 19, 2015	4.83	1074.07	-	13.90	1.10	10.00
				November 16, 2015	4.30	1074.60	-	13.90	1.10	10.00
				May 9, 2016	4.88	1074.02	-	13.88	1.12	10.18
				November 15, 2016	5.99	1072.91	-	13.89	1.11	10.09
				May 16, 2017	3.72	1075.18	-	13.87	1.13	10.27
	1			November 6, 2017	5.81	1073.09	-	13.85	1.15	10.45
				May 14, 2018 November 12, 2018	4.01 4.12	1074.89 1074.78	-	13.85 13.86	1.15 1.14	10.45 10.36
	†			April 21, 2008	5.54	1074.78		14.44	-0.14	0.00
	1			May 6, 2008	-	-	-	-	-0.14	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	6.73	1074.69	-	14.42	-0.12	0.00
	1			February 17, 2009		4075.04	-	- 44.40	-	-
				May 11, 2009	5.78	1075.64	-	14.42	-0.12	0.00
	1			August 5, 2009 November 30, 2009	5.73 6.11	1075.69 1075.31	-	14.45 14.28	-0.15 0.02	0.00 0.18
				February 24, 2010	6.40	1075.02	-	14.26	-0.04	0.00
	1			May 17, 2010	5.56	1075.86	-	14.38	-0.08	0.00
				November 1, 2010	5.58	1075.84		14.02	0.28	2.55
				May 9, 2011	5.17	1076.25	-	14.20	0.10	0.91
				November 7, 2011	5.75	1075.67	-	13.95	0.35	3.18
PZ-0802	1081.42	14.30	11.0	May 29, 2012	5.72	1075.70	-	13.93	0.37	3.36
	1			November 26, 2012 May 6, 2013	6.70 5.83	1074.72 1075.59	-	13.95 13.89	0.35	3.18 3.73
				May 6, 2013 November 12, 2013	5.83 6.42	1075.59	-	13.89	0.41	4.36
	1			May 27, 2014	5.63	1075.00	-	13.83	0.47	4.27
				November 17, 2014	6.42	1075.00	-	13.82	0.48	4.36
	1			May 19, 2015	6.29	1075.13	-	13.87	0.43	3.91
				November 16, 2015	5.95	1075.47	-	13.81	0.49	4.45
	1			May 9, 2016	5.32	1076.10	-	13.90	0.40	3.64
				November 15, 2016	7.80	1073.62	-	13.86	0.44	4.00
				May 16, 2017	5.50	1075.92	-	13.91	0.39	3.55
				November 6, 2017	6.09	1075.33	-	13.80	0.50	4.55
				May 14, 2018	4.48	1076.94	-	13.80	0.50	4.55
	1	İ	l	November 12, 2018	5.71	1075.71	-	13.94	0.36	3.27

Table 2 Gauging Data

				onta Former MGP Site				_	Accumulated	Percent Screen
Well ID	Measuring Point Elevation	Actual Depth to Bottom	Screen Length	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Thickness of Sediments (feet)	Occluded By Sediments (%)
				April 21, 2008	6.35	1075.49	-	21.55	-0.05	0.00
				May 6, 2008	-	-	-	-	-	-
				August 5, 2008 November 10, 2008	7.01	1074.83	-	21.56	-0.06	0.00
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	6.48	1075.36	-	21.49	0.01	0.06
				August 5, 2009	6.15	1075.69	-	21.58	-0.08	0.00
				November 30, 2009	7.49	1074.35	-	21.49	0.01	0.06 0.22
				February 24, 2010 May 17, 2010	6.70 6.25	1075.14 1075.59	-	21.46 21.45	0.05	0.28
				November 1, 2010	6.15	1075.69	-	21.51	-0.01	0.00
				May 9, 2011	5.74	1076.10	-	21.50	0.00	0.00
				November 7, 2011	6.30	1075.54	-	21.52	-0.02	0.00
PZ-0803	1081.84	21.50	18.0	May 29, 2012	6.19 6.92	1075.65	-	21.54	-0.04 0.02	0.00
				November 26, 2012 May 6, 2013	6.27	1074.92 1075.57	-	21.48 21.51	-0.01	0.11
				November 12, 2013	6.74	1075.10	-	21.45	0.05	0.28
				May 27, 2014	5.93	1075.91	-	21.46	0.04	0.22
				November 17, 2014	6.62	1075.22	-	21.45	0.05	0.28
				May 19, 2015	6.39	1075.45	-	21.43	0.07	0.39
				November 16, 2015	6.42	1075.42	-	21.46	0.04	0.22
				May 9, 2016 November 15, 2016	6.39 7.15	1075.45 1074.69	-	21.45 21.47	0.05	0.28 0.17
				May 16, 2017	5.98	1075.86	-	21.46	0.04	0.22
				November 6, 2017	6.82	1075.02	-	21.42	0.08	0.44
				May 14, 2018	6.09	1075.75	-	21.46	0.04	0.22
				November 12, 2018	6.06	1075.78	-	21.43	0.07	0.39
				April 21, 2008	5.29	1071.94	-	5.68	0.42	6.40
				May 6, 2008 August 5, 2008	-	-	-	-	-	-
				November 10, 2008	-	-	-	5.69	0.41	6.20
				February 17, 2009	-	-	-	-	-	-
				May 11, 2009	4.92	1072.31	-	5.68	0.42	6.40
				August 5, 2009	-	-	-	5.68	0.42	6.40
				November 30, 2009	-	-	-	5.68	0.42	6.40
				February 24, 2010 May 17, 2010	-	-	-	5.71 5.71	0.39	5.80 5.80
				November 1, 2010	-	-	-	5.74	0.36	5.20
				May 9, 2011	-	-	-	5.74	0.36	5.20
				November 7, 2011	5.67	1071.56	-	5.72	0.38	5.60
PZ-105*	1077.23	6.10	5.0	May 29, 2012	5.03	1072.20	-	5.76	0.34	4.80
				November 26, 2012 May 6, 2013	4.86	1072.37	-	5.69 5.69	0.41	6.20 6.20
				November 12, 2013	5.64	1071.59	-	5.71	0.39	5.80
				May 27, 2014	5.28	1071.95	-	5.68	0.42	6.40
				November 17, 2014	-	-	-	6.03	0.07	0.00
				May 19, 2015	-	-	-	5.71	0.39	5.80
				November 16, 2015 May 9, 2016	5.57	1071.66	-	5.71 5.71	0.39	5.80 5.80
				November 15, 2016	5.56	1071.67	-	5.71	0.39	5.80
				May 16, 2017	4.85	1072.38	-	5.72	0.38	5.60
				November 6, 2017	-	-	-	5.71	0.39	5.80
				May 14, 2018	5.08	1072.15	-	5.72	0.38	5.60
				November 12, 2018	5.50	1071.73	-	5.72	0.38	5.60
				April 21, 2008 May 6, 2008	8.90	1073.06	-	-	-	-
				August 5, 2008	-	-	-	-	-	-
				November 10, 2008	7.04	1074.92	-	-	-	-
				February 17, 2009	6.38	1075.58	-	-	-	-
				May 11, 2009	6.59	1075.37	-	-	-	-
				August 5, 2009 November 30, 2009	6.52 6.63	1075.44 1075.33	-	-	-	-
				February 24, 2010	6.82	1075.33	-	-	-	-
				May 17, 2010	6.54	1075.42	-	-	-	-
				November 1, 2010	6.51	1075.45	-	-		-
				May 9, 2011	6.60	1075.36	-	-	-	-
00.46=	SG 107 1081.96			November 7, 2011 May 29, 2012	6.58 6.74	1075.38 1075.22	-	-	-	-
SG 107		-	-	November 26, 2012	6.82	1075.22	-	-	-	-
				May 6, 2013	6.74	1075.14	-	-	-	-
				November 12, 2013	6.85	1075.11	-	-		-
				May 27, 2014	6.68	1075.28	-	-	-	-
				November 17, 2014	6.85	1075.11	-	-	-	-
				May 19, 2015	6.79	1075.17	-	-	-	-
				November 16, 2015 May 9, 2016	6.81 6.72	1075.15 1075.24	-	-	-	-
				November 15, 2016	6.91	1075.24	-	-	-	-
				May 16, 2017	6.66	1075.30	-	-	1	-
				November 6, 2017	6.80	1075.16	-	-	-	-
				May 14, 2018	6.77	1075.19	-	-	-	-
	l	1		November 12, 2018	6.33	1075.63	-	-	-	-

Table 2 Gauging Data

Bevation Reiton Reiton	Well ID	Measuring Point	Actual Depth to	Screen	onta Former MGP Site	Depth to Water	Groundwater	Depth to	Depth to Bottom	Accumulated Thickness of	Percent Screen Occluded By
May 6, 2008				Length		(feet TOC)	Elevation	(feet TOC)	(feet TOC)		
Acquest 5, 2008											
February 17, 2009											
May 11, 2009											
August 5, 2009											
November 30, 2009											
May 17, 2010 4.31 1079-14						-	-	-	-	-	-
November 1, 2010 4.39 1075-06					•						
May 9, 2011 4.05 1079-84											
November 12, 2018 3.29 1079-16											-
November 28, 2012 3, 349 1075-58											
May 12, 2013 3.65 1075-80	SG 105	1079.45	-	-							
May 17, 2014 4.18 1075.27											
November 17, 2014 4.79 1074 68					November 12, 2013				-	-	-
May 17, 2015											
November 16, 2015 4.11 1075.34											
November 1, 2016 3.86 1075.59											
May 18, 2017 3.51 1075.94										-	-
November 6, 2017											
Mey 14, 2018 4, 24 1075, 28											
Agril 21, 2008 4, 90 1076, 21					·						
May 6, 2008 -								-	-	-	-
November 1, 2008 4.9 1076 32 - - - - - - - - -											
November 10, 2008											
May 1, 1, 2009							1076.32			-	-
August 5, 2009 4.40 1076.41					, .						
November 10, 2009		SG-110 1081.75 -									
May 17, 2010											
November 1, 2010 -										-	-
SG-110 1081.75 - Mey 9, 2011						5.05	1075.76				
November 7, 2011 5.34 -						-	-				
November 26, 2012 -						5.34		-	-	-	-
May 6, 2013 5.20	SG-110		-	-							
November 12, 2013											
November 17, 2014 5.05		SG-110 1081.75 -						-	-	-	-
May 19, 2015 5.25 1076.50											
November 16, 2015 5.44 1076.31 -											
May 9, 2016 5.41 1076.34 -											
May 16, 2017											
November 6, 2017 5.36 1076.39 - - - - - -											
May 14, 2018 5.65 1076.10					•						
November 12, 2018 4.90 1076.85 - - - - -											
May 6, 2008									-	-	-
August 5, 2008							1074.14				
November 10, 2008							-	-	-	-	-
February 17, 2009 3.80 1074.56							1074.18	-	-	-	-
August 5, 2009 3.86 1074.50					February 17, 2009	3.80	1074.56				
November 30, 2009 3.89 1074.47 - - - - - - - - -											
February 24, 2010											
November 1, 2010 3.82 1074.58 - - - - - May 9, 2011 4.09 1074.31 - - - - November 7, 2011 4.15 1074.25 - - - - May 29, 2012 4.30 1074.10 - - - - - November 26, 2012 4.42 1073.98 - - - - - November 12, 2013 4.15 1074.25 - - - - November 12, 2013 4.15 1074.25 - - - - May 27, 2014 4.28 1074.12 - - - - - November 17, 2014 4.05 1074.35 - - - - November 17, 2015 4.42 1073.98 - - - - November 16, 2015 4.42 1073.98 - - - - November 15, 2016 4.49 1073.91 - - - - November 15, 2016 5.65 1072.75 - - - November 6, 2017 5.45 1072.95 - - - November 6, 2017 5.37 1073.03 - - - - May 14, 2018 5.70 1072.70 - - - -					February 24, 2010	-	-	-	-	-	-
SG-111 1078.40 May 9, 2011 November 7, 2011 A .15 1074.25											
SG-111 1078.40 - May 29, 2012											
SG-111 1078.40 - May 29, 2012											
May 6, 2013 4.30 1074.10	SG-111	SG-111 1078.40	-	-	May 29, 2012						
November 12, 2013											
May 27, 2014 4.28 1074.12											
May 19, 2015 4.35 1074.05					May 27, 2014	4.28	1074.12				
November 16, 2015											
May 9, 2016 4.49 1073.91											
November 15, 2016 5.65 1072.75											
November 6, 2017 5.37 1073.03											
May 14, 2018 5.70 1072.70											
1 1015/11001 12,2010 0.70 1012.00 - - - - -					November 12, 2018	5.45	1072.70	-	-	-	-

Table 2 Gauging Data

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Notes:

- 1. All measurements from Top of Casing (TOC).
- 2. "-" Indicates measurement not taken or not available.
- 3. Elevations in feet above mean sea level (ft amsl), 1929 National Geodetic Vertical Datum (NGVD).
- 4. NA indicates NRW not installed at time of gauging event.
- 5. Staff gauge SG-105 re-installed Apr 2008 and missing on Nov 2008 gauging event.
- 6. During the Nov 2009 gauging event SG-105 and SG-110 were destroyed.
- 7. During the Feb 2010 gauging event SG-111 was not accessible.
- 8. During the May 2010 site activities;
 - SG-110 and SG-105 were replaced and resurveyed at a later date.
 - the riser height for MW-9502S, AW-01, AW-04, AW-08, AW-11 was adjusted and the wells resurveyed May 9, 2011.
 - MW-0203, MW-0301, MW-8806S, MW-8807S, MW-8808S, MW-9110S, AW-03, AW-04, AW-05, AW-14 and AW-16 were redeveloped. Depth to bottom measurements for these wells list the depth to bottom recorded after redevelopment.
- 9. During the May 2011 site activities;
 - SG-105, SG-111, MW-9502S, AW-01, AW-04, AW-08, AW-11 locations and elevations resurveyed May 9, 2011.
 - AW-06, AW-09, AW-AW-14, PMW-07 were redeveloped May 31, 2011. Depth to bottom measurements for these wells list depth to bottom recorded after redevelopment.
- 10. Staff gauge SG-110 missing during November 2010 and May 2011 gauging events.
- 11. Staff gauge SG-110 reinstalled during November 2011 site visit and discovered missing before it could be resurveyed.
- 12. Staff gauge SG-110 reinstalled during May 2012 site visit and resurveyed May 30, 2012.
- 13. Staff gauge SG-110 reinstalled during November 2012 site visit. Survey information not available for inclusion in this report.
- 14. * Indicates location was installed with a sump. Refer to well construction log for respective sump length.
- 15. Calculations of percent screen occluded are based on total screen length installed and do not take into consideration length of saturated screen.
- 16. Gauging data could not be collected from locations PMW-02 and PZ-0801 November 17, 2014 due to standing surface water at time of gauging.
- 17. Staff Gauge SG-110, Piezometer PZ-0801, and Performance Monitoring Wells PMW-05 and PMW-06 were resurveyed May 20, 2015.
- 18. Removed 0.12 feet of riser from PMW-02 after the November 16, 2015 gauging event.
- 19. Removed 0.10 feet of riser from NRW-02 after the November 16, 2015 gauging event.
- 20. Gauging data could not be collected on November 6, 2018 from locations PMW-01, PMW-02, PMW-03, PMW-05, PMW-07 and PMW-08 due to standing surface water at time of gauging.
- 21. Due to standing surface water at the time of the November 6, 2017 gauging event, NRW-04 was gauged November 7, 2017.

	Location ID:			MW-0201 MW-0201	MW-0201	MW-0201	MW-0201	MW-0201	MW-0201	MW-0203	MW-0203	MW-0203	MW-0203	MW-0203	MW-0203	MW-0203																	
r	Date Collected:	NYSDEC GW Stds & GVs	Units	05/29/03	04/22/08	11/11/08		12/02/09	05/20/10	11/02/10	05/10/11	11/08/11		11/29/12		11/14/13		11/18/14			05/10/16		05/16/17	11/07/17	05/15/18	11/13/18	05/29/03	04/23/08	11/11/08	05/12/09	12/01/09		
втех	Date Concession.			00/20/00	04/22/00	11111100	00/12/00	12/02/00	00/20/10	11102110	00/10/11	11100111	00/00/12	102012	00/00/10	1111111	00/20/14	11/10/14	00/10/10	1	00/10/10	11110110	00/10/11	11101711	00/10/10	1110110	00/20/00	0.1120/00	11111100	00/12/00	12/01/00	00.10.10	11/02/10
Benzene		1	μg/L	2,500	1,300 D	1,700	930 D	1,900 D	1,200	2,200 DJ	270	1,400 D	850 J	670	690	500	310	430	110	180	190	470	250	120	94	290 D	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene		5	μg/L	500	550 D	660	290 D	670 D	380	810 DJ	100	640 D	290 J	480	350	390	180	290	46	91	63	250	91	64	24	140 D	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m/p-Xylenes			μg/L	NA	100	NA	36	93	26 J	86	6.7 J	83	28	39	40	24	13	28	10 U	4.8 J	6.1 J	44	12	3.7	3	21	NA	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U
o-Xylene			μg/L	NA	180 D	NA	87 D	200 D	110	240 D	32	200 D	110	150	150	120	79	120	31	68	54	140	75	54	31	99 D	NA	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U
Toluene		5	μg/L	28 J	19	18 J	9.9	17	11 J	16	3.3 J	15	9.6 J	9.6 J	11	8.1 J	4.8 J	8.3	5 U	3.2 J	3.3 J	8.2	4.7 J	2.8	1.7	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)		5	μg/L	530	NA	310	110 D	290 D	140	350 D	39	280 D	140	190	190	140	92	150	31	73	60	180	87	58	34	120 D	5.0 U	NA	3.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Total BTEX			μg/L	3,558	2,149	2,688 J	1,340	2,877	1,731 J	3,376	412 J	2,335	1,290 J	1,350 J	1,241	1,038 J	587 J	878	187	347 J	316 J	908	433 J	245	154	550 D	ND	ND	ND	ND	ND	ND	ND
PAHs																																	
Acenaphthene		20	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Acenaphthylene			μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Anthracene		50	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Benzo(a)anthrace	ene	0.002	μg/L	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	0.34 J	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 UB	0.50 U	0.48 U
Benzo(a)pyrene		0	μg/L	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.37 J	0.50 U	0.48 U
Benzo(b)fluoranti	hene	0.002	μg/L	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Benzo(g,h,i)peryl	ene		μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.24 J	0.50 U	0.48 U
Benzo(k)fluoranti	hene	0.002	ug/L	1 U	0.5 UJ	0.5 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.47 U	0.47 U	0.5 U	0.48 U
Chrysene		0.002	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 UJ	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 UB	0.50 U	0.48 U
Dibenzo(a,h)anth	racene		ug/L	1 U	0.5 U	0.5 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	1 U	0.5 U	0.5 U	0.47 U	0.47 U	0.5 U	0.48 U
Fluoranthene		50	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Fluorene		50	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Indeno(1,2,3-cd)p	pyrene	0.002	μg/L	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 UJ	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Naphthalene		10	μg/L	7.8 J	460 D	470 D	54	390 D	160	260 D	4.8 U	560 D	270 D	530 D	390	400 D	230 D	460	4.3 J	280 D	120	580 D	210 D	390	5 U	360 D	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Phenanthrene		50	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Pyrene		50	μg/L	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.94 U	0.49 U	4.8 U	4.8 U	4.8 U	4.7 U	4.7 U	4.8 U	4.5 U	270 U	4.9 U	4.8 U	4.8 U	4.8 U	5 U	50 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.48 U
Total PAHs			μg/L	7.8	460 J	470 J	54	390 J	160	260 J	ND	560 J	270 D	530 D	390	400 D	230 D	460	4.3 J	280	120	580	210	390	ND	360 D	ND	ND	ND	ND	0.61 J	ND	ND

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 2. D Compound quantitated using a secondary dilution.

 3. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 4. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 5. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 6. ND not detected

 7. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 8. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 9. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 10. NA not analyzed

 11. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

Location ID:			MW-0203	MW 0202	MW-0203	MW-0301																										
Location ID: Date Collected:	NYSDEC GW Stds & GVs	Units	11/02/10	05/10/11	11/08/11	05/31/12	11/29/12	05/10/13	11/14/13	05/29/14	11/18/14	05/19/15	11/18/15	05/10/16	11/15/16	05/17/17		05/15/18	11/13/18	05/29/03	04/22/08	11/12/08	05/12/09	12/01/09	05/18/10	11/02/10	05/10/11	11/08/11	05/30/12	11/29/12		11/15/13
BTEX	Olds & OVS		11/02/10	00/10/11	11/00/11	00/01/12	11/25/12	00/10/10	11/14/10	00/23/14	11/10/14	00/10/10	11/10/10	00/10/10	11/10/10	00/11/11	11101711	00/10/10	11/10/10	00/25/00	04/22/00	11/12/00	00/12/03	12/01/03	00/10/10	11/02/10	00/10/11	11/00/11	00/00/12	11/23/12	00/03/10	11/10/10
Benzene	1	μg/L	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
Ethylbenzene	5	μg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.9 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	4.0 U	1.0 U	1 U	1 U	1 U								
m/p-Xylenes		μg/L	2.0 U	2.0 U	2.0 U	2.0 U	0.72 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	NA	2.0 U	NA	2.0 U	2 U	2 U	2 U						
o-Xylene		μg/L	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1.0 U	NA	1.0 U	1 U	1 U	1 U						
Toluene	5	μg/L	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.0 U	1.0 U	1 U	1 U	1 U								
Xylenes (total)	5	μg/L	2.0 U	2.0 U	2.0 U	2.0 U	0.72 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	5.0 U	NA	3.0 U	2.0 U	2 U	2 U	2 U						
Total BTEX		μg/L	ND	ND	ND	ND	1.62 J	ND																								
PAHs																																
Acenaphthene	20	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Acenaphthylene		μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Anthracene	50	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Benzo(a)anthracene	0.002	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Benzo(a)pyrene	0	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 UJ
Benzo(b)fluoranthene	0.002	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 UJ
Benzo(g,h,i)perylene		μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 UJ
Benzo(k)fluoranthene	0.002	ug/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 UJ
Chrysene	0.002	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 UJ	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	NA
Dibenzo(a,h)anthracene		ug/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 UJ
Fluoranthene	50	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Fluorene	50	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Indeno(1,2,3-cd)pyrene	0.002	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 UJ	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 UJ
Naphthalene	10	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	1.4 J	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Phenanthrene	50	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Pyrene	50	μg/L	0.48 U	4.8 U	4.7 U	4.7 U	4.7 U	4.8 U	5.2 U	4.6 U	4.8 U	5 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.48 U	0.52 U	0.47 U	4.7 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U
Total PAHs		μg/L	ND	ND	ND	ND	1.4 J	ND																								

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D. Compound quantitated using a secondary dilution.

 4. J. Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U. Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B. Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND. not detected

 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

	Location ID:			MW-0301	MW-8604S	MW-8806S	MW-8806S	MW-8806S	MW-8806S	MW-8806S	MW-8806S																						
D	, n	NYSDEC GW Stds & GVs	Units	05/29/14		04/22/08	11/11/08	05/13/09	12/01/09	05/20/10	11/03/10		11/08/11	05/31/12	11/30/12	05/10/13	11/14/13	05/29/14	11/19/14	05/21/15	11/17/15	05/10/16	11/15/16	05/16/17	11/08/17	05/15/18	11/13/18	05/23/03	04/23/08	11/12/08	05/12/09	12/01/09	05/18/10
втех																																	
Benzene		1	μg/L	1 U	360	22	33	43	24	20	31	14	3.2	5.8	0.67 J	2.5	0.72 J	3.9	2.1	2.2	2.1	2.6	3.1	1.6	1.6	1.1	2.4	580	1.0 U	150 D	1.0 U	14	1.0 U
Ethylbenzene		5	μg/L	1 U	230	31	35	62	35	21	18	1.0 U	1.1	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.5	1 U	1 U	1 U	1 U	1 U	1.8 J	1.0 U	26	1.0 U	1.0 U	1.0 U
m/p-Xylenes			μg/L	2 U	NA	1.9 J	NA	6.8	2.8	2.3	2.0	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.7 J	2 U	2 U	2 U	2 U	2 U	NA	2.0 U	NA	2.0 U	2.0 U	2.0 U
o-Xylene			μg/L	1 U	NA	9.3	NA	17	11	10	5.2	0.83 J	2.0	1.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4	1 U	1 U	1 U	1 U	1 U	NA	1.0 U	NA	1.0 U	1.4	1.0 U
Toluene		5	μg/L	1 U	3.7 J	0.55 J	0.78 J	1.4	0.86 J	0.87 J	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.1 J	1.0 U	4.4	1.0 U	0.52 J	1.0 U
Xylenes (total)		5	μg/L	2 U	32	NA	10	24	14	13	7.1	0.83 J	2.0	1.9 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3.1	2 U	2 U	3 U	2 U	2 U	74	NA	52	2.0 U	2.0	2.0 U
Total BTEX			μg/L	ND	626 J	54 J	79 J	130	74 J	55 J	56	15 J	6.3	9.4 J	0.67 J	2.5	0.72 J	3.9	2.1	2.2	2.1	11.2	3.1	1.6	1.6	1.1	2.4	658	ND	232	ND	17 J	ND
PAHs																																	
Acenaphthene		20	μg/L	5.1 U	3.3 J	9.0	41	22	24	4.0 J	20	2.3 J	7.9	7.3	7.9	1.5 J	16	6.1	14	8.8	11	3.7 J	12	5.3	15	5.5	7.6	2.8	0.50 U	10	0.48 U	0.47 U	0.48 U
Acenaphthylene			μg/L	5.1 U	0.80 J	0.80	2.0	1.2	0.81	0.21 J	0.44 J	4.8 U	0.52 J	4.7 U	1.2 J	4.7 U	2 J	0.42 J	1.8 J	0.73 J	1 J	0.49 J	0.75 J	5 U	1.4 J	0.5 J	1.1 J	1.6 J	0.50 U	0.90	0.48 U	0.47 U	0.48 U
Anthracene		50	μg/L	5.1 U	10 U	0.50 U	1.0	0.47 U	0.31 J	0.50 U	0.22 J	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Benzo(a)anthrace	ne	0.002	μg/L	5.1 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 UB	0.50 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Benzo(a)pyrene		0	μg/L	5.1 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Benzo(b)fluoranth	ene	0.002	μg/L	5.1 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Benzo(g,h,i)peryle	ne		μg/L	5.1 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 UJ	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Benzo(k)fluoranth	ene	0.002	ug/L	5.1 U	1 U	0.5 UJ	0.5 U	0.47 U	0.47 U	0.5 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.48 U	0.47 U	0.48 U
Chrysene		0.002	μg/L	NA	10 U	0.50 U	0.50 U	0.47 U	0.47 UB	0.50 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 UJ	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Dibenzo(a,h)anthr	acene		ug/L	5.1 U	1 U	0.5 U	0.5 U	0.47 U	0.47 U	0.5 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.48 U	0.47 U	0.48 U
Fluoranthene		50	μg/L	5.1 U	10 U	0.50 U	0.90	0.47 U	0.24 J	0.50 U	0.18 J	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	0.45 J	4.9 U	0.39 J	5.1 U	4.7 U	5 U	0.6 J	5 U	0.66 J	5 U	0.52 J	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Fluorene		50	μg/L	5.1 U	2.0 J	2.0	7.0	3.9	3.6	0.61	3.4	4.8 U	1.3 J	1.4 J	1.5 J	4.7 U	2.4 J	1.2 J	2.3 J	1.6 J	2.1 J	0.99 J	1.4 J	1.1 J	1.7 J	0.97 J	0.92 J	0.20 J	0.50 U	0.30 J	0.48 U	0.47 U	0.48 U
Indeno(1,2,3-cd)py	rene	0.002	μg/L	5.1 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 UJ	5.1 U	4.7 U	5 UJ	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Naphthalene		10	μg/L	5.1 U	53	14	34	33	32 J	7.2 J	24	1.6 J	3.6 J	4.7 U	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	2.6 J	4.8 U	5 U	5 U	5 U	5 U	130	0.50 U	7.0	0.48 U	2.0	0.48 U
Phenanthrene		50	μg/L	5.1 U	0.70 J	0.40 J	5.0	1.3	1.7	0.22 J	1.6	4.8 U	0.61 J	0.63 J	4.8 U	4.7 U	4.7 U	4.9 U	4.8 U	5.1 U	4.7 U	5 U	4.8 U	5 U	5 U	5 U	5 U	0.40 J	0.50 U	0.60	0.48 U	0.47 U	0.48 U
Pyrene		50	μg/L	5.1 U	10 U	0.50 U	0.70	0.47 U	0.19 J	0.50 U	0.14 J	4.8 U	4.7 U	4.7 U	0.34 J	4.7 U	0.42 J	4.9 U	0.34 J	5.1 U	4.7 U	5 U	0.54 J	5 U	0.62 J	5 U	0.46 J	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U
Total PAHs			μg/L	ND	60 J	26 J	92 J	62 J	63 J	12 J	50 J	3.9 J	14 J	9.3 J	11 J	1.5 J	21.3 J	7.72 J	18.8 J	11.1 J	14.1 J	7.78 J	15.3 J	6.4 J	19.4 J	7.0 J	10.6 J	140 J	ND	19 J	ND	2.0	ND

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates that the analyte was detected at the PQL.

 7. ND not detected at the PQL.

 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

Location	n ID: NYSDEC GW	/ Unito	MW-8806S	MW-8807S																												
Date Collec	cted: Stds & GVs		11/02/10	05/10/11	11/09/11	05/31/12	11/28/12	05/08/13	11/15/13	05/28/14	11/19/14	05/19/15	11/17/15	05/11/16	11/16/16	05/17/17	11/07/17	05/15/18	11/13/18	05/28/03	04/22/08	11/11/08	05/12/09	12/02/09	05/18/10	11/02/10	05/10/11	11/08/11	05/30/12	11/29/12	05/09/13	11/14/13
втех																																
Benzene	1	μg/L	1.0 U	1.0 U	1.0 U	1.0 U	4.5 J	1 U	810 DJ	1 U	120 D	1 U	1 U	1 U	100	1 U	24	1 U	1 U	96	1.0 U	1.0 U	1.0 U	1.0 U	8.5	1.0 U	1.0 U	16	1.0 U	1.0 U	1 U	1 U
Ethylbenzene	5	μg/L	1.0 U	1.0 U	1.0 U	1.0 U	4	1 U	200 D	1 U	49	1 U	1 U	1 U	31	1 U	1 U	1 U	1 U	24	1.0 U	1 U	1 U									
m/p-Xylenes		μg/L	2.0 U	2.0 U	2.0 U	2.0 U	0.92 J	2 U	100	2 U	28	2 U	2 U	2 U	7.7	2 U	2 U	2 U	2 U	NA	2.0 U	NA	2.0 U	2 U	2 U							
o-Xylene		μg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1 U	220 D	1 U	49	1 U	1 U	1 U	19	1 U	5.5	1 U	1 U	NA	1.0 U	NA	1.0 U	1 U	1 U							
Toluene	5	μg/L	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	18	1 U	8.1	1 U	1 U	1 U	2.6	1 U	1 U	1 U	1 U	0.40 J	1.0 U	1 U	1 U									
Xylenes (total)	5	μg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.2	2 U	310 D	2 U	77	2 U	2 U	2 U	27	2 U	5.5	2 U	2 U	2.6 J	NA	3.0 U	2.0 U	2 U	2 U							
Total BTEX		μg/L	ND	ND	ND	ND	11 J	ND	1,338 J	ND	254	ND	ND	ND	161	ND	29.5	ND	ND	123	ND	ND	ND	ND	8.5	ND	ND	16	ND	ND	ND	ND
PAHs																																
Acenaphthene	20	μg/L	0.47 U	4.8 U	4.8 U	5.2 U	1.2 J	4.8 U	36	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.9	5 U	1.7 J	5 U	5 U	2.9 J	0.90	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Acenaphthylene		μg/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	3.3 J	4.5 U	250 U	4.6 U	5.1 U	4.8 U	0.42 J	5 U	5 U	5 U	5 U	0.30 J	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Anthracene	50	μg/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	0.44 J	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Benzo(a)anthracene	0.002	μg/L	0.37 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 U	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Benzo(a)pyrene	0	μg/L	0.38 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 UJ	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Benzo(b)fluoranthene	0.002	μg/L	0.32 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 UJ	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Benzo(g,h,i)perylene		μg/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 UJ	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Benzo(k)fluoranthene	0.002	ug/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 UJ	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Chrysene	0.002	μg/L	0.24 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 U	4.5 U	250 UJ	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Dibenzo(a,h)anthracene		ug/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 UJ	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Fluoranthene	50	μg/L	0.31 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 U	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Fluorene	50	μg/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	2.3 J	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Indeno(1,2,3-cd)pyrene	0.002	μg/L	0.12 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	4.7 UJ	4.5 U	250 UJ	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Naphthalene	10	μg/L	0.47 U	4.8 U	4.8 U	5.2 U	9.9	4.8 U	1,400 DJ	4.5 U	260	4.6 U	5.1 U	4.8 U	73 D	5 U	15	5 U	5 U	3.0 J	13	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Phenanthrene	50	μg/L	0.47 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	2.3 J	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Pyrene	50	μg/L	0.30 J	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	0.43 J	4.5 U	250 U	4.6 U	5.1 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.48 U	0.47 U	0.48 U	0.48 U	4.9 U	4.7 U	4.7 U	4.8 U	5 U	4.9 U
Total PAHs		μg/L	2.0 J	ND	ND	ND	11 J	ND	1,445 J	ND	260	ND	ND	ND	78.3 J	ND	16.7 J	ND	ND	6.2	14	ND										

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D. Compound quantitated using a secondary dilution.

 4. J. Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U. Indicates that the analyte was detected at the PQL.

 7. ND. not detected an estimated values between the instrument detection limit (IDL) and the PQL.

 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

Location ID:			MW 88078	MW 88075	MW-8807S	MW-88079	MW 88078	MW-8807S	MW 88078	MW-8807S	MW-8807S	MW-8807S	MW-8808S	MW 88088	MW-8808S	MW-8808S	MW-8808S	MW-8808S														
	NYSDEC GW Stds & GVs	Units	05/28/14			11/17/15			05/16/17	11/07/17		11/14/18	05/29/03	04/22/08	11/11/08	05/12/09	12/01/09	05/18/10			11/08/11	05/30/12		05/09/13	11/14/13		11/19/14		11/17/15			
втех								1					20120100				120.00		1			20.20.12				1						
Benzene	1	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1.0 U	1.0 U	1.0 U	0.82 J	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U					
Ethylbenzene	5	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	4.0 U	1.0 U	1.0 U	0.49 J	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U					
m/p-Xylenes		μg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	NA	2.0 U	NA	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U						
o-Xylene		μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	NA	1.0 U	NA	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U						
Toluene	5	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	5.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U								
Xylenes (total)	5	μg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	5.0 U	NA	3.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U						
Total BTEX		μg/L	ND	1.3 J	ND																											
PAHs																																
Acenaphthene	20	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Acenaphthylene		μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Anthracene	50	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Benzo(a)anthracene	0.002	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Benzo(a)pyrene	0	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Benzo(b)fluoranthene	0.002	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Benzo(g,h,i)perylene		μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Benzo(k)fluoranthene	0.002	ug/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Chrysene	0.002	μg/L	4.5 U	4.8 UJ	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 UJ	5 U	5 U	4.8 U	4.8 U	5 U
Dibenzo(a,h)anthracene		ug/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Fluoranthene	50	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Fluorene	50	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Indeno(1,2,3-cd)pyrene	0.002	μg/L	4.5 U	4.8 UJ	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 UJ	5 U	5 U	4.8 U	4.8 U	5 U
Naphthalene	10	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Phenanthrene	50	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Pyrene	50	μg/L	4.5 U	4.8 U	4.8 U	5.2 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.47 U	4.7 U	4.7 U	4.7 U	4.8 U	4.7 U	4.9 U	4.7 U	5.1 U	5 U	5 U	4.8 U	4.8 U	5 U
Total PAHs		μg/L	ND																													

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND not detected

 8. Sample results detected above the Method Detection Limit (IMDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes (BTEX) and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

Location ID:			MW-8808S	MW-8808S	MW-8808S	MW-9109S	MW-9110S																									
Date Collected:	NYSDEC GW Stds & GVs	Units	11/07/17	05/15/18	11/13/18	05/20/03	04/22/08	11/11/08	05/12/09	12/01/09	05/20/10	11/02/10	05/10/11	11/08/11	05/30/12	11/30/12	05/10/13	11/15/13	05/29/14	05/28/03	04/22/08	11/11/08	05/12/09	12/02/09	05/18/10	11/02/10	05/10/11	11/08/11	05/30/12	11/29/12	05/09/13	11/14/13
втех	•					•	•			•		•		•	•					•	•	•										
Benzene	1	μg/L	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U
Ethylbenzene	5	μg/L	1 U	1 U	1 U	4.0 U	1.0 U	1 U	1 U	1 U	1 U	4.0 U	1.0 U	1 U	1 U	1 U																
m/p-Xylenes		μg/L	2 U	2 U	2 U	NA	2.0 U	NA	2.0 U	2 U	2 U	2 U	2 U	NA	2.0 U	NA	2.0 U	2 U	2 U	2 U												
o-Xylene		μg/L	1 U	1 U	1 U	NA	1.0 U	NA	1.0 U	1 U	1 U	1 U	1 U	NA	1.0 U	NA	1.0 U	1 U	1 U	1 U												
Toluene	5	μg/L	1 U	1 U	1 U	5.0 U	1.0 U	1 U	1 U	1 U	1 U	5.0 U	1.0 U	1 U	1 U	1 U																
Xylenes (total)	5	μg/L	3 U	2 U	2 U	5.0 U	NA	3.0 U	2.0 U	2 U	2 U	2 U	2 U	5.0 U	NA	3.0 U	2.0 U	2 U	2 U	2 U												
Total BTEX		μg/L	ND																													
PAHs																																
Acenaphthene	20	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Acenaphthylene		μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Anthracene	50	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Benzo(a)anthracene	0.002	μg/L	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 UB	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Benzo(a)pyrene	0	μg/L	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 UJ	4.6 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Benzo(b)fluoranthene	0.002	μg/L	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 UJ	4.6 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Benzo(g,h,i)perylene		μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 UJ	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Benzo(k)fluoranthene	0.002	ug/L	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 UJ	4.6 U	1 U	0.5 UJ	0.5 U	0.47 U	0.47 U	0.48 U	0.48 U	5 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Chrysene	0.002	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 UB	0.48 UJ	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	NA	NA	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Dibenzo(a,h)anthracene		ug/L	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 UJ	4.6 U	1 U	0.5 U	0.5 U	0.47 U	0.47 U	0.48 U	0.48 U	5 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Fluoranthene	50	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Fluorene	50	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Indeno(1,2,3-cd)pyrene	0.002	μg/L	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 UJ	4.6 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Naphthalene	10	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.11 J	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Phenanthrene	50	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Pyrene	50	μg/L	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.48 U	0.48 U	0.48 U	4.8 U	4.7 U	4.8 U	4.7 U	4.7 U	5.4 U	4.6 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.48 U	0.48 U	5.0 U	4.8 U	4.7 U	4.8 U	4.8 U	4.6 U
Total PAHs		μg/L	ND	0.11 J	ND																											

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND not detected

 8. Sample results detected above the Method Detection Limit (IMDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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	Location ID:			MW 91109	MW 91109	MW 91108	MW 91109	MW 91108	MW 91108	MW 91109	MW 91109	MW 91109	MW 91109	MW 01118	MW 01118	MW 91118	MW 91119	MW 01119	MW 91118	MW 91118	MW 01118	MW-9111S	MW-9111S	MW-9111S	MW-9111S	MW-9111S	MW 91118	MW-9111S	MW 01118	MW-9111S	MW-9111S	MW 91119	MW-9111S
	NY	YSDEC GW itds & GVs	Units	05/28/14			11/17/15		11/15/16				11/14/18	05/28/03			05/12/09	12/01/09	05/20/10	11/02/10	05/10/11	11/09/11	05/30/12	11/30/12	05/10/13	11/14/13		11/19/14	05/21/15	11/17/15		11/15/16	05/16/17
втех																														-			
Benzene		1	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.4	1.0 U	57	1.0 U	2.1	1 U	1 U	1 U	1.6	1 U	1 U	2.2	1 U	1 U						
Ethylbenzene		5	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.0 U	1.0 U	2.0	1.0 U	0.79 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U						
m/p-Xylenes			μg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2.0 U	NA	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U						
o-Xylene			μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1.0 U	NA	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U						
Toluene		5	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U								
Xylenes (total)		5	μg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	5.0 U	NA	1.4 J	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U						
Total BTEX			μg/L	ND	2.4	ND	60 J	ND	2.9 J	ND	ND	ND	1.6	ND	ND	2.2	ND	ND															
PAHs																																	
Acenaphthene		20	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	11	5.0	10	4.5	7.8	4.5	6.1	3.8 J	5.6	4.2 J	5.3	3.1 J	5.8	3.8 J	3.7 J	3.4 J	3.7 J	4 J	4.7	2.5 J
Acenaphthylene			μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	5.2 U	4.7 U	0.68 J	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Anthracene		50	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.099 J	0.47 U	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Benzo(a)anthracene		0.002	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Benzo(a)pyrene		0	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Benzo(b)fluoranthen	e	0.002	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Benzo(g,h,i)perylene	•		μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 UJ	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Benzo(k)fluoranthen	e	0.002	ug/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.47 U	0.47 U	0.5 U	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Chrysene		0.002	μg/L	5.1 U	5 UJ	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.11 J	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 UJ	5 U	5 U	4.9 U	4.6 U	5 U
Dibenzo(a,h)anthrac	ene		ug/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.47 U	0.47 U	0.5 U	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Fluoranthene		50	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Fluorene		50	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	0.80 J	0.50	1.0	0.42 J	0.77	0.35 J	0.58	4.8 U	0.51 J	5.2 U	0.42 J	4.7 U	0.54 J	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Indeno(1,2,3-cd)pyre	ene	0.002	μg/L	5.1 U	5 UJ	4.6 U	4.9 U	4.8 U	4.8 UJ	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 UJ	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 UJ	5 U	5 U	4.9 U	4.6 U	5 U
Naphthalene		10	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	0.40 J	0.50 U	5.0	0.47 U	0.32 J	0.19 J	0.47 U	4.8 U	4.7 U	5.2 U	1.2 J	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Phenanthrene		50	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.20 J	0.47 U	0.17 J	0.50 U	0.47 U	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Pyrene		50	μg/L	5.1 U	5 U	4.6 U	4.9 U	4.8 U	4.8 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.50 U	0.47 U	4.8 U	4.7 U	5.2 U	4.7 U	4.7 U	5.2 U	4.6 U	4.7 U	5 U	5 U	4.9 U	4.6 U	5 U
Total PAHs			μg/L	ND	12 J	5.5	16 J	4.9 J	9.1 J	5.3 J	6.7	3.8 J	6.1 J	4.2 J	6.9 J	3.8 J	6.34 J	3.8 J	3.7 J	3.4 J	3.7 J	4 J	4.7	2.5 J									

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND not detected

 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

1								MIN 0440D	100 A 440 D	1884 0440D	1884 0440D	**** 0440D	MM 0440D	100 0440D	MM 0440D	1884 0440D	1814 0440D	MM 0440D	BBW 0440D			1884 0440D	**** 0440D		1011 0440D		MM 0440D	MW-9112D	MW-9112D	MW-9112S	ABM 04400	
Location ID:	NYSDEC GW Stds & GVs	Units	11/08/17	MW-9111S	11/13/18			MW-9112D 12/17/07	11/11/08	MW-9112D 05/12/09	MW-9112D 12/01/09	05/19/10	MW-9112D 11/03/10	05/10/11	MW-9112D 11/08/11	MW-9112D 05/30/12	MW-9112D 11/29/12	05/09/13	11/13/13	05/28/14	-	05/19/15	-		MW-9112D 11/15/16			05/16/18		05/22/03	MW-9112S 09/18/07	MW-9112S 12/17/07
BTEX	olus u ovs		11/00/17	00/10/10	11/10/10	00/22/00	03/10/01	12/1//01	11/11/00	00/12/03	12/01/03	00/10/10	11700710	00/10/11	11700/11	00/00/12	11/20/12	00/03/10	11/10/10	00/20/14	11/10/14	00/15/10	11/10/10	00/11/10	11/10/10	00/10/11	11101711	00/10/10	11/10/10	00/22/00	03/10/01	12/1//07
Benzene	1	μg/L	18	0.68 J	1 U	1.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	0.50 U	0.50 U
Ethylbenzene	5	μg/L	0.45 J	1 U	1 U	4.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.75 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	4.0 U	0.50 U	0.50 U
m/p-Xylenes		μg/L	2 U	2 U	2 U	NA	NA	NA	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA
o-Xylene		μg/L	0.21 J	1 U	1 U	NA	NA	NA	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
Toluene	5	μg/L	1 U	1 U	1 U	5.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.0 U	0.50 U	0.50 U
Xylenes (total)	5	μg/L	3 U	2 U	2 U	5.0 U	1.5 U	1.5 U	3.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	5.0 U	1.5 U	1.5 U
Total BTEX		μg/L	18.5 J	0.68 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs																																
Acenaphthene	20	μg/L	4.4 J	2.5 J	4.5 J	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Acenaphthylene		μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Anthracene	50	μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Benzo(a)anthracene	0.002	μg/L	5 U	5 U	5 U	1.0 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA
Benzo(a)pyrene	0	μg/L	5 U	5 U	5 U	1.0 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 UJ	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA
Benzo(b)fluoranthene	0.002	μg/L	5 U	5 U	5 U	1.0 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA
Benzo(g,h,i)perylene		μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 UJ	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Benzo(k)fluoranthene	0.002	ug/L	5 U	5 U	5 U	1 U	NA	NA	0.5 U	0.5 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	1 U	NA	NA
Chrysene	0.002	μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 UJ	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Dibenzo(a,h)anthracene		ug/L	5 U	5 U	5 U	1 U	NA	NA	0.5 U	0.5 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 UJ	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	1 U	NA	NA
Fluoranthene	50	μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	0.41 J	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Fluorene	50	μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Indeno(1,2,3-cd)pyrene	0.002	μg/L	5 U	5 U	5 U	1.0 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 UJ	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA
Naphthalene	10	μg/L	1.6 J	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	1.2 J	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Phenanthrene	50	μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	0.54 J	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Pyrene	50	μg/L	5 U	5 U	5 U	10 U	NA	NA	0.50 U	0.52 U	9.6 U	0.47 U	0.47 U	4.8 U	4.9 U	5.6 U	4.7 U	4.8 U	4.8 U	4.6 U	4.7 U	4.8 U	4.9 U	4.9 U	4.6 U	5 U	5 U	5 U	5 U	10 U	NA	NA
Total PAHs		μg/L	6 J	2.5 J	4.5 J	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.2 J	ND	ND	ND	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND not detected

 8. Sample results detected above the Method Detection Limit (IMDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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Location ID:	NYSDEC GW	Units	MW-9112S	MW-9114S																												
Date Collected:		Units	04/23/08	11/11/08	05/12/09	12/01/09	05/19/10	11/03/10	05/10/11	11/08/11	05/30/12	11/29/12	05/09/13	11/13/13	05/28/14	11/18/14	05/19/15	11/18/15	05/11/16	11/15/16	05/16/17	11/07/17	05/15/18	11/13/18	05/21/03	04/23/08	11/11/08	05/12/09	12/02/09	05/19/10	11/02/10	05/11/11
втех																																
Benzene	1	μg/L	1.0 U	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	1.0 U	1.0 U	1.0 U	1.0 U	0.42 J	1.0 U	1.0 U	1.0 U								
Ethylbenzene	5	μg/L	1.0 U	1.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.0 U	1.0 U														
m/p-Xylenes		μg/L	2.0 U	NA	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2.0 U	NA	2.0 U										
o-Xylene		μg/L	1.0 U	NA	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1.0 U	NA	1.0 U										
Toluene	5	μg/L	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.0 U	1.0 U														
Xylenes (total)	5	μg/L	NA	3.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	5.0 U	NA	2.0 U											
Total BTEX		μg/L	ND	1.6 J	ND	0.42 J	ND	ND	ND																							
PAHs																																
Acenaphthene	20	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Acenaphthylene		μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Anthracene	50	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Benzo(a)anthracene	0.002	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Benzo(a)pyrene	0	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Benzo(b)fluoranthene	0.002	μg/L	0.50 UJ	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Benzo(g,h,i)perylene		μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Benzo(k)fluoranthene	0.002	ug/L	0.5 UJ	0.5 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1 U	0.5 UJ	0.5 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Chrysene	0.002	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 UJ	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Dibenzo(a,h)anthracene		ug/L	0.5 UJ	0.5 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1 U	0.5 U	0.5 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Fluoranthene	50	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Fluorene	50	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Indeno(1,2,3-cd)pyrene	0.002	μg/L	0.50 UJ	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 UJ	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Naphthalene	10	μg/L	0.50	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	1.8 J	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	1.0	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Phenanthrene	50	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Pyrene	50	μg/L	0.50 U	0.50 U	0.48 U	0.48 U	0.47 U	0.47 U	4.8 U	4.7 U	5.6 U	4.7 U	4.8 U	5.6 U	4.6 U	5.5 U	5.2 U	4.8 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.50 U	0.50 U	0.47 U	0.47 U	0.49 U	0.47 U	4.9 U
Total PAHs		μg/L	0.50	ND	1.8 J	ND	1.2 J	ND	ND	ND	ND	ND	ND																			

- Notes:
 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).
 3. D Compound quantitated using a secondary dilution.
 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).
 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.
 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.
 7. ND not detected
 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.
 9. Shading indicates that the result exceeds the NYSDEC TOGS 11.1 Water Quality Standard or Guidance Value.
 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.
 11. NA not analyzed
 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

	Location ID:	NYSDEC GW	Units	MW-9114S	MW-9502S																												
	Date Collected:		· · · · ·	11/08/11	05/30/12	11/29/12	05/09/13	11/14/13	05/28/14	11/18/14	05/19/15	11/17/15	05/11/16	11/16/16	05/16/17	11/07/17	05/16/18	11/14/18	05/21/03	09/18/07	12/17/07	12/01/09	05/20/10	11/02/10	05/10/11	11/08/11	05/30/12	11/29/12	05/09/13	11/14/13	05/28/14	11/18/14	05/19/15
BTEX																																	
Benzene		1	μg/L	1.0 U	1.0 U	0.76 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	1.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	1 U	1 U	1 U	1 U	1 U
Ethylbenzene		5	μg/L	1.0 U	1.0 U	1.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.0 U	0.94	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes			μg/L	2.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U					
o-Xylene			μg/L	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U					
Toluene		5	μg/L	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1.9	1 U	1 U	25	1 U	0.55 J	1 U	5.0 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes (total)		5	μg/L	2.0 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	5.0 U	1.4 J	1.5 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U					
Total BTEX			μg/L	ND	ND	2.7 J	ND	ND	ND	ND	ND	1.9	ND	ND	25	ND	0.55 J	ND	ND	2.3 J	ND	3.2	ND	ND	ND	ND	ND						
PAHs																																	
Acenaphthene		20	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	0.49 J	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Acenaphthylene			μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Anthracene		50	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Benzo(a)anthrac	cene	0.002	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Benzo(a)pyrene		0	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Benzo(b)fluoran	thene	0.002	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Benzo(g,h,i)pery	rlene		μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 UJ	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 UJ
Benzo(k)fluoran	thene	0.002	ug/L	4.7 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	1 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Chrysene		0.002	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 UJ	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 UJ	4.8 U
Dibenzo(a,h)ant	hracene		ug/L	4.7 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 UJ	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	1 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Fluoranthene		50	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Fluorene		50	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Indeno(1,2,3-cd)	pyrene	0.002	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 UJ	4.7 UJ	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	1.0 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 UJ	4.8 UJ
Naphthalene		10	μg/L	0.47 U	5.3 U	2.3 J	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	2.1 J	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Phenanthrene		50	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Pyrene		50	μg/L	0.47 U	5.3 U	4.7 U	4.7 U	5.4 U	4.6 U	4.7 U	5 U	5.1 U	4.8 U	4.5 U	5 U	5 U	5 U	5 U	10 U	NA	NA	0.47 U	0.48 U	0.48 U	4.8 U	4.8 U	5.2 U	4.7 U	4.8 U	5.3 U	4.5 U	4.7 U	4.8 U
Total PAHs			μg/L	ND	ND	2.3 J	ND	NA	NA	ND	ND	ND	ND	ND	ND	2.6 J	ND	ND	ND	ND	ND												

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND not detected

 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value.

 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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Annual Periodic Review Report (Q39 - Q42) Oneonta Former MGP Site, Oneonta, New York

Location ID:			MW-9502S	PTMW_0202	PTMW-0202																								
Date Collected:	NYSDEC GW Stds & GVs	Units	11/17/15	05/10/16	11/15/16	05/16/17	11/07/17	05/15/18	11/14/18	05/28/03	12/01/09	05/20/10	11/02/10	05/10/11	11/09/11	05/30/12	11/30/12	05/09/13	11/14/13		11/19/14	05/21/15	11/17/15	05/10/16	11/15/16	05/16/17	11/08/17	05/15/18	11/13/18
втех	•			•	•		•	•	•				•	•	•			•	•										
Benzene	1	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	22	12	7.1	33	1.0 U	1.0 U	32	320 D	120	30	53	290 D	90	230	97	1 U	40	380	260	160
Ethylbenzene	5	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7.7	1.0 U	12	2 U	1 U	1 U	0.92 J	1 U	21	4 U	1 U	1 U	43	4 U	4 U					
m/p-Xylenes		μg/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2.0 U	2.0 U	1.4 J	2.0 U	2.0 U	2.0 U	1.2 J	4 U	2 U	2 U	2.6	2 U	8 U	8 U	2 U	2 U	3.8	8 U	8 U
o-Xylene		μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	2.4	1.0 U	3.2	1.0 U	1.0 U	1.0 U	12	6.2	1 U	1.6	7.5	1.9	7.2	4 U	1 U	2.7	17	4.9	5.3
Toluene	5	μg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.0 U	1.0 U	0.67 J	2 U	1 U	1 U	1 U	1 U	4 U	4 U	1 U	0.52 J	0.86 J	4 U	4 U					
Xylenes (total)	5	μg/L	2 U	2 U	2 U	2 U	3 U	2 U	2 U	1.6 J	2.9	2.0 U	4.6	2.0 U	2.0 U	2.0 U	13	6.2	2 U	1.6 J	10	1.9 J	7.2 J	8 U	2 U	2.7	21	4.9 J	5.3 J
Total BTEX		μg/L	ND	31 J	15	7.1	38 J	ND	ND	32	346 J	126	30	54.6 J	301 J	91.9 J	258 J	97	ND	43.2 J	445 J	265 J	165 J						
PAHs																													
Acenaphthene	20	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	52	39	34	42	23	41	35	55	43 J	20	43	61 J	40	20	39	4.6 U	57	86 D	63	88
Acenaphthylene		μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1.2 J	0.47 U	0.48 U	0.40 J	4.8 U	0.46 J	5.3 U	0.41 J	R	5.5 U	0.4 J	230 U	0.43 J	4.7 U	4.8 U	4.6 U	5 U	0.8 J	0.62 J	5 U
Anthracene	50	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	0.60 J	0.27 J	0.12 J	0.23 J	4.8 U	4.7 U	5.3 U	0.33 J	R	5.5 U	0.34 J	230 U	5.1 U	0.27 J	0.56 J	4.6 U	0.63 J	1.2 J	0.64 J	1.7 J
Benzo(a)anthracene	0.002	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	0.34 J	5.5 U	4.6 U	230 U	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Benzo(a)pyrene	0	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	R	5.5 U	4.6 U	230 U	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Benzo(b)fluoranthene	0.002	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	0.32 J	5.5 U	4.6 U	230 U	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Benzo(g,h,i)perylene		μg/L	5 U	4.7 U	0.38 J	5 U	5 U	5 U	5 U	10 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	R	5.5 U	4.6 U	230 U	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Benzo(k)fluoranthene	0.002	ug/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	R	5.5 U	4.6 U	230 U	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Chrysene	0.002	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	10 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	R	5.5 U	4.6 U	230 UJ	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Dibenzo(a,h)anthracene		ug/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	R	5.5 U	4.6 U	230 U	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Fluoranthene	50	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	0.50 J	0.56	0.45 J	0.88	4.8 U	4.7 U	5.3 U	0.41 J	R	0.5 J	0.56 J	230 U	5.1 U	0.44 J	0.6 J	4.6 U	0.63 J	0.93 J	0.55 J	1.6 J
Fluorene	50	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	6.9 J	3.1	5.2	9.8	4.8 U	4.7	5.2 J	7.8	3.9 J	2.2 J	8.4	230 U	3.4 J	3.5 J	5.9	4.6 U	8	16	11	21
Indeno(1,2,3-cd)pyrene	0.002	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	1.0 U	0.47 U	0.48 U	0.48 U	4.8 U	4.7 U	5.3 U	4.7 U	R	5.5 U	4.6 U	230 UJ	5.1 U	4.7 U	4.8 U	4.6 U	5 U	5 U	5 U	5 U
Naphthalene	10	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	0.70 J	16	0.36 J	48	4.8 U	4.7 U	5.3 U	69	R	1.3 J	4.6 U	120 J	5.1 U	18	12	4.6 U	5 U	290 D	7.8	99 D
Phenanthrene	50	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	5.2 J	0.38 J	0.48 U	0.42 J	4.8 U	4.7 U	5.3 U	2.4 J	1.7 J	5.5 U	1.5 J	230 U	0.89 J	1.1 J	2.4 J	4.6 U	2.6 J	4.8 J	2.1 J	7.8
Pyrene	50	μg/L	5 U	4.7 U	4.6 U	5 U	5 U	5 U	5 U	0.50 J	0.55	0.45 J	0.85	4.8 U	0.85 J	5.3 U	0.44 J	0.71 J	0.53 J	0.68 J	230 U	5.1 U	4.7 U	0.59 J	4.6 U	0.61 J	1 J	0.51 J	1.5 J
Total PAHs		μg/L	ND	ND	0.38 J	ND	ND	ND	ND	68 J	60 J	41 J	100 J	23	47 J	40 J	136 J	50 J	24.5 J	54.9 J	181 J	44.7 J	43.3 J	61.1 J	ND	69.5 J	401 J	86.2 J	221 DJ

- Notes:

 1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs) and 8270C (SVOCs).

 3. D Compound quantitated using a secondary dilution.

 4. J Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).

 5. U Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.

 6. B Indicates an estimated values between the instrument detection limit (IDL) and the PQL.

 7. ND not detected

 8. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.

 9. Shading indicates that the result exceeds the NYSDEC TOGS 11.1 Water Quality Standard or Guidance Value.

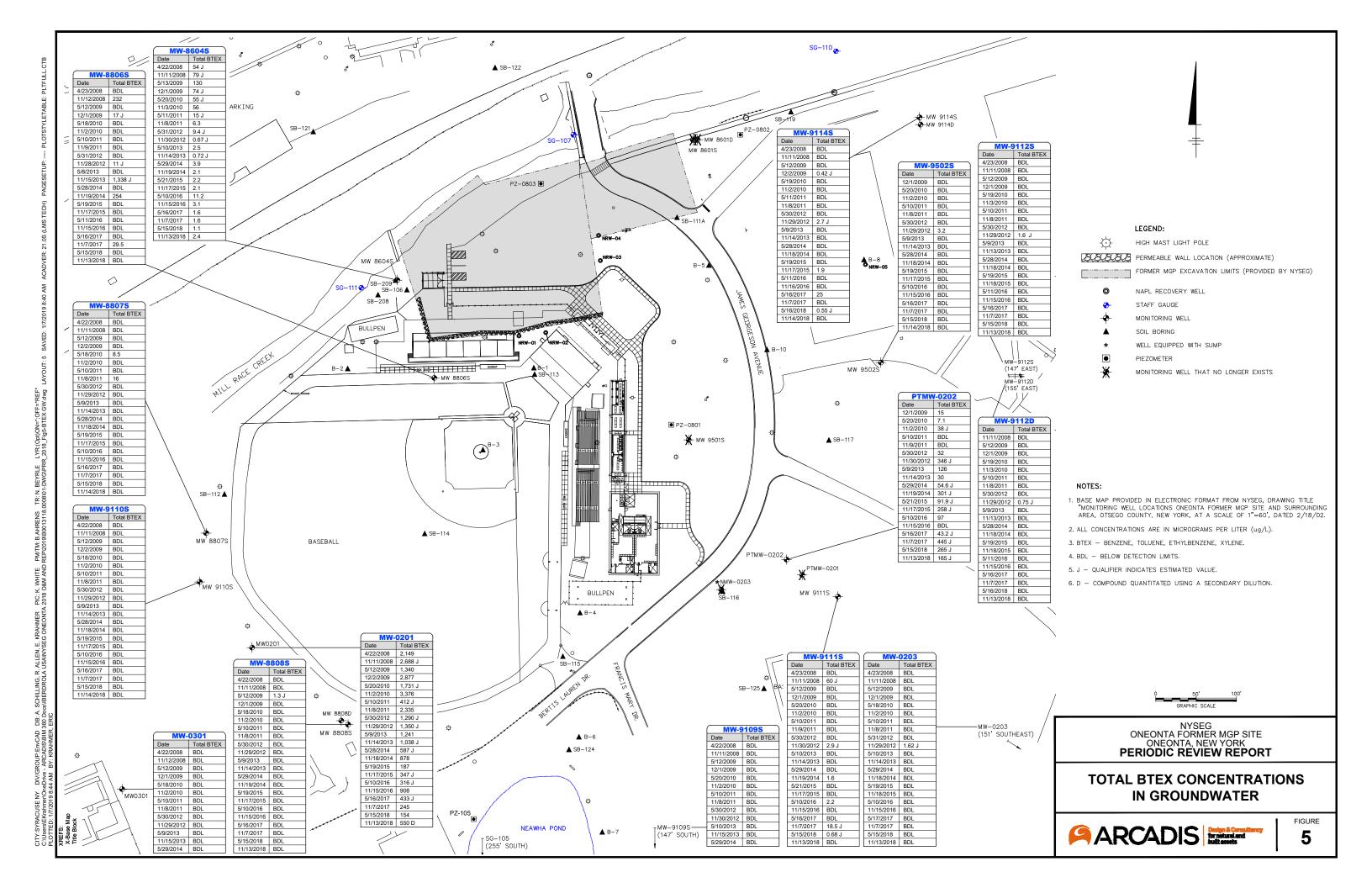
 10. Only detected Benzene, Ethlybenzene, Toluene, Xylenes [BTEX] and Polycyclic Aromatic Hydrocarbons [PAH] are presented.

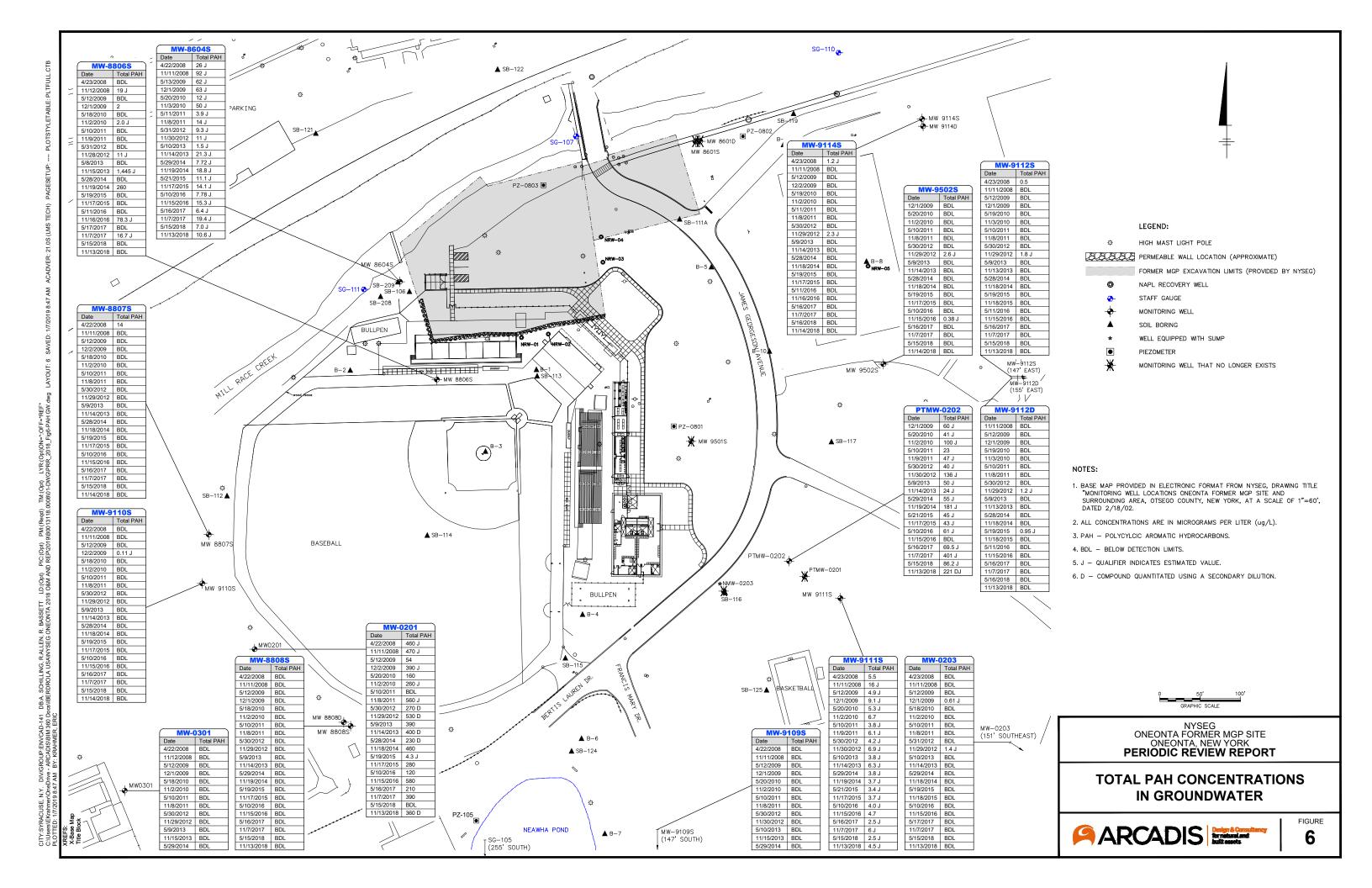
 11. NA not analyzed

 12. For groundwater samples where the laboratory reported both the individual congeners for xylenes (m/p- & o-) plus a value for total xylenes, total BTEX calculations used the laboratory reported value for total xylenes.

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FIGURES





APPENDIX A Absorbent Socks Photographic Log

APPENDIX A PHOTOGRAPHS OF SPENT SORBENT SOCK

CLIENT: NYSEG

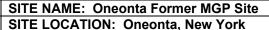
PROJECT#: B0013118.0007

PHOTOGRAPH #: 1

PHOTOGRAPHER: RDC

DATE: 5/14/2018
DIRECTION: NA

COMMENT: Picture showing sorbent socks removed from AW-12. Two socks installed in series. Sock installed deeper (left) is completely saturated with DNAPL.





CLIENT: NYSEG

PROJECT#: B0013118.0007

PHOTOGRAPH #: 2

PHOTOGRAPHER: RDC

DATE: 5/14/2018 DIRECTION: NA

comment: Picture showing sorbent socks removed from AW-12. Two socks installed in series. Sock installed deeper (left) is completely saturated with DNAPL.

SITE NAME: Oneonta Former MGP Site SITE LOCATION: Oneonta, New York



APPENDIX A PHOTOGRAPHS OF SPENT SORBENT SOCK

CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: B0013118.0007 SITE LOCATION: Oneonta, New York

PHOTOGRAPH#: 4
PHOTOGRAPHER: RDC

DATE: 11/14/2018 DIRECTION: NA

COMMENT: Picture showing sorbent socks removed from AW-12. Two socks installed in series. Sock installed deeper (right) is partially saturated with DNAPL.



CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: B0013118.0007 SITE LOCATION: Oneonta, New York

PHOTOGRAPH #: 5 PHOTOGRAPHER: RDC

DATE: 11/14/2018 DIRECTION: NA

COMMENT: Picture showing sorbent material inside sock (after it has been opened and examined).



APPENDIX B

DUSR



NYSEG Oneonta Former MGP Site

DATA USABILITY SUMMARY REPORT

Oneonta, New York

Volatile and Semivolatile Analysis

SDG #480-136145-1

Analyses Performed By: TestAmerica Laboratories Amherst, New York

Report #29941R Review Level: Tier III

Project: B0013118.0008.00002

DATA REVIEW REPORT

SUMMARY

This data usability summary report (DUSR) summarizes the review of Sample Delivery Group (SDG) # 480-136145-1 for samples collected in association with the NYSEG Oneonta Former MGP Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

			Sample	Parent		А	nalysis	5	
Sample ID	Lab ID	Matrix	Collection Date	Sample	voc	svoc	РСВ	MET	MISC
MW-8807S	480-136145-1	Water	5/15/2018		Х	Х			
MW-8806S	480-136145-2	Water	5/15/2018		Х	Х			
MW-9110S	480-136145-3	Water	5/15/2018		Х	Х			
DUP-051518	480-136145-4	Water	5/15/2018	MW-9110S	Х	Х			
MW-0201	480-136145-5	Water	5/15/2018		Х	Х			
MW-8604S	480-136145-6	Water	5/15/2018		Х	Х			
MW-8808S	480-136145-7	Water	5/15/2018		Х	Х			
MW-9502S	480-136145-8	Water	5/15/2018		Х	Х			
PTMW-0202	480-136145-9	Water	5/15/2018		Х	Х			
MW-9111S	480-136145-10	Water	5/15/2018		Х	Х			
MW-9112S	480-136145-11	Water	5/15/2018		Х	Х			
TRIP BLANK	480-136145-12	Water	5/15/2018		Х				
MW-0203	480-136145-13	Water	5/15/2018		Х	Х			
MW-9112D	480-136145-14	Water	5/16/2018		Х	Х			
MW-9114S	480-136145-15	Water	5/16/2018		Х	Х			

Note:

1. Matrix spike/matrix spike duplicate was performed on sample location MW-8807S for VOCs and SVOCs.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

	Rep	orted	Performance Acceptable		Not
Items Reviewed	No	Yes	No	Yes	Required
Sample receipt condition		Х		Х	
Requested analyses and sample results		Х		Х	
Master tracking list		Х		Х	
4. Methods of analysis		Х		Х	
5. Reporting limits		Х		Х	
6. Sample collection date		Х		Х	
7. Laboratory sample received date		Х		Х	
8.Sample preservation verification (as applicable)		Х		Х	
Sample preparation/extraction/analysis dates		Х		Х	
10. Fully executed Chain-of-Custody (COC) form		Х		Х	
11. Narrative summary of QA or sample problems provided		Х		Х	
12. Data Package Completeness and Compliance		Х		Х	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines (October 1999) and applicable Region II SOPs. USEPA NFGs and Region II SOPs were followed for qualification purposes.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries.

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than the control limit are presented in the following table.

Sample Locations	Compound
	Benzene
	Toluene
MW-8807S	Ethylbenzene
WW-0007S	m-Xylene & p-Xylene
	o-Xylene
	Xylenes, Total

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
	Non-detect	UJ
> UL	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	/Duplicate ID Compound		Duplicate Result	RPD
MW-9110S/DUP-051518	All compounds	U	U	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

The laboratory noted that sample location PTMW-0202 (480-136145-9) was originally analyzed at a dilution to bring the concentration of target analytes within the calibration range. The dilution resulted in elevated reporting limits (RLs).

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Rej	ported	Performance Acceptable		Not					
	No	Yes	No	Yes	Required					
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)										
Tier II Validation										
Holding times		Х		Х						
Reporting limits (units)		Х		X						
Blanks										
A. Method blanks		X		X						
B. Equipment blanks										
C. Trip blanks		Х		X						
Laboratory Control Sample (LCS)		Х		X						
Laboratory Control Sample Duplicate(LCSD)										
LCS/LCSD Precision (RPD)										
Matrix Spike (MS)		Х		X						
Matrix Spike Duplicate(MSD)		Х		Х						
MS/MSD Precision (RPD)		Х	Х							
Field/Lab Duplicate (RPD)		Х		Х						
Surrogate Spike Recoveries		Х		Х						
Dilution Factor		Х		X						
Moisture Content	Х				Х					
Tier III Validation					1					
System performance and column resolution		Х		Х						
Initial calibration %RSDs		Х		Х						
Continuing calibration RRFs		Х		Х						
Continuing calibration %Ds		Х		Х						
Instrument tune and performance check		Х		Х						
lon abundance criteria for each instrument used		Х		Х						
Internal standard		Х		Х						
Compound identification and quantitation										
A. Reconstructed ion chromatograms		Х		Х						
B. Quantitation Reports		Х		Х						

VOCs: SW-846 8260		orted		mance ptable	Not
		Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETR	Y (GC/M	S)			
C. RT of sample compounds within the established RT windows		X		Х	
D. Transcription/calculation errors present		Х		Х	
E. Reporting limits adjusted to reflect sample dilutions		Х		Х	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	/Duplicate ID Compound		Duplicate Result	RPD
MW-9110S/DUP-051518	All compounds	U	U	AC

Notes:

AC Acceptable

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Rep	orted	Performance Acceptable		Not	
	No	Yes	No	Yes	Required	
GAS CHROMATOGRAPHY/MASS SPECTROM	ETRY (GC	/MS)				
Tier II Validation						
Holding times		X		X		
Reporting limits (units)		X		X		
Blanks						
A. Method blanks		X		X		
B. Equipment blanks					X	
Laboratory Control Sample (LCS) %R		Х		Х		
Laboratory Control Sample Duplicate(LCSD) %R					Х	
LCS/LCSD Precision (RPD)					Х	
Matrix Spike (MS) %R		X		X		
Matrix Spike Duplicate(MSD) %R		X		X		
MS/MSD Precision (RPD)		X		X		
Field/Lab Duplicate (RPD)		X		X		
Surrogate Spike Recoveries		X		X		
Dilution Factor		X		X		
Moisture Content	Х				Х	
Tier III Validation						
System performance and column resolution		Х		Х		
Initial calibration %RSDs		X		х		
Continuing calibration RRFs		Х		X		
Continuing calibration %Ds		X		Х		
Instrument tune and performance check		Х		Х		
lon abundance criteria for each instrument used		Х		Х		
Internal standard		Х		Х		
Compound identification and quantitation						
F. Reconstructed ion chromatograms		Х		Х		
G. Quantitation Reports		Х		Х		
RT of sample compounds within the established RT windows		Х		Х		

SVOCs: SW-846 8270		Repo	orted	Perforr Accep		Not	
		No	Yes	No	Yes	Required	
GAS	CHROMATOGRAPHY/MASS SPECTROM	ETRY (GC	/MS)				
I.	Quantitation transcriptions/calculations		Х		Х		
J.	Reporting limits adjusted to reflect sample dilutions		x		X		

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA USABILITY SUMMARY REPORT

SAMPLE COMPLIANCE REPORT

Sample		Protocol		Matrix	Compliancy ¹			ncy ¹		
Delivery Group (SDG)	Sampling Date		Sample ID		voc	svoc	РСВ	MET	MISC	Noncompliance
	5/15/2018	USEPA/ SW846	MW-8807S	Water	No	Yes				VOC – MS/MSD RPD
	5/15/2018	USEPA/ SW846	MW-8806S	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	MW-9110S	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	DUP-051518	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	MW-0201	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	MW-8604S	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	MW-8808S	Water	Yes	Yes				
480-136145-1	5/15/2018	USEPA/ SW846	MW-9502S	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	PTMW-0202	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	MW-9111S	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	MW-9112S	Water	Yes	Yes				
	5/15/2018	USEPA/ SW846	TRIP BLANK	Water	Yes					
	5/15/2018	USEPA/ SW846	MW-0203	Water	Yes	Yes				
	5/16/2018	USEPA/ SW846	MW-9112D	Water	Yes	Yes				
	5/16/2018	USEPA/ SW846	MW-9114S	Water	Yes	Yes				

DATA USABILITY SUMMARY REPORT

N	l = .	L -

Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

DATA USABILITY SUMMARY REPORT

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: June 17, 2018

Jugh c. Home

PEER REVIEW: Andrew Korycinski

DATE: June 21, 2018

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8807S

Lab Sample ID: 480-136145-1 Date Sampled: 05/15/2018 0845

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33147.D Dilution: 1.0 Initial Weight/Volume: 5 mL Analysis Date: 05/21/2018 1224 Final Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1224 Prep Date: 05/21/2018 1224

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND	-F2 UJ	0.41	1.0
Toluene	ND	F <mark>2</mark>	0.51	1.0
Ethylbenzene	ND	F <mark>2</mark>	0.74	1.0
m-Xylene & p-Xylene	ND	F <mark>2</mark>	0.66	2.0
o-Xylene	ND	F <mark>2</mark>	0.76	1.0
Xylenes, Total	ND	₹2 \/	0.66	2.0

1
Qualifier Acceptance Limits
77 - 120
80 - 120
73 - 120
75 - 123

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8806S

Lab Sample ID: 480-136145-2 Date Sampled: 05/15/2018 0920

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33148.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1251 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	ND		0.41	1.0	
Toluene	ND		0.51	1.0	
Ethylbenzene	ND		0.74	1.0	
m-Xylene & p-Xylene	ND		0.66	2.0	
o-Xylene	ND		0.76	1.0	
Xylenes, Total	ND		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	103		77 - 120	
Toluene-d8 (Surr)	93		80 - 120	
4-Bromofluorobenzene (Surr)	88		73 - 120	
Dibromofluoromethane (Surr)	97		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9110S

Lab Sample ID: 480-136145-3 Date Sampled: 05/15/2018 1210

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33149.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1318 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	ND		0.41	1.0	
Toluene	ND		0.51	1.0	
Ethylbenzene	ND		0.74	1.0	
m-Xylene & p-Xylene	ND		0.66	2.0	
o-Xylene	ND		0.76	1.0	
Xylenes, Total	ND		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		77 - 120
Toluene-d8 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	89		73 - 120
Dibromofluoromethane (Surr)	96		75 - 123

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: DUP-051518

Lab Sample ID: 480-136145-4 Date Sampled: 05/15/2018 0000

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33150.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1346 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		77 - 120	
Toluene-d8 (Surr)	97		80 - 120	
4-Bromofluorobenzene (Surr)	90		73 - 120	
Dibromofluoromethane (Surr)	99		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-0201

Lab Sample ID: 480-136145-5 Date Sampled: 05/15/2018 1335

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33151.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1413 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	94		0.41	1.0	
Toluene	1.7		0.51	1.0	
Ethylbenzene	24		0.74	1.0	
m-Xylene & p-Xylene	3.0		0.66	2.0	
o-Xylene	31		0.76	1.0	
Xylenes, Total	34		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		77 - 120
Toluene-d8 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	92		73 - 120
Dibromofluoromethane (Surr)	93		75 - 123

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8604S

Lab Sample ID: 480-136145-6 Date Sampled: 05/15/2018 1305

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33152.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1441 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	1.1		0.41	1.0	
Toluene	ND		0.51	1.0	
Ethylbenzene	ND		0.74	1.0	
m-Xylene & p-Xylene	ND		0.66	2.0	
o-Xylene	ND		0.76	1.0	
Xylenes, Total	ND		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		77 - 120
Toluene-d8 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	91		73 - 120
Dibromofluoromethane (Surr)	94		75 - 123

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8808S

Lab Sample ID: 480-136145-7 Date Sampled: 05/15/2018 1435

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33153.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1508 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	ND		0.41	1.0	
Toluene	ND		0.51	1.0	
Ethylbenzene	ND		0.74	1.0	
m-Xylene & p-Xylene	ND		0.66	2.0	
o-Xylene	ND		0.76	1.0	
Xylenes, Total	ND		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		77 - 120	
Toluene-d8 (Surr)	96		80 - 120	
4-Bromofluorobenzene (Surr)	89		73 - 120	
Dibromofluoromethane (Surr)	96		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9502S

Lab Sample ID: 480-136145-8 Date Sampled: 05/15/2018 1445

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33154.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1536 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		77 - 120	
Toluene-d8 (Surr)	96		80 - 120	
4-Bromofluorobenzene (Surr)	88		73 - 120	
Dibromofluoromethane (Surr)	98		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: PTMW-0202

Lab Sample ID: 480-136145-9 Date Sampled: 05/15/2018 1520

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415625 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33185.D Dilution: 4.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/22/2018 0651 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	260		1.6	4.0	
Toluene	ND		2.0	4.0	
Ethylbenzene	ND		3.0	4.0	
m-Xylene & p-Xylene	ND		2.6	8.0	
o-Xylene	4.9		3.0	4.0	
Xylenes, Total	4.9	J	2.6	8.0	

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	103		77 - 120	
Toluene-d8 (Surr)	94		80 - 120	
4-Bromofluorobenzene (Surr)	87		73 - 120	
Dibromofluoromethane (Surr)	101		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9111S

Lab Sample ID: 480-136145-10 Date Sampled: 05/15/2018 1625

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33156.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1631 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	0.68	J	0.41	1.0	
Toluene	ND		0.51	1.0	
Ethylbenzene	ND		0.74	1.0	
m-Xylene & p-Xylene	ND		0.66	2.0	
o-Xylene	ND		0.76	1.0	
Xylenes, Total	ND		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		77 - 120
Toluene-d8 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	91		73 - 120
Dibromofluoromethane (Surr)	93		75 - 123

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9112S

Lab Sample ID: 480-136145-11 Date Sampled: 05/15/2018 1645

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33157.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1658 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		77 - 120	
Toluene-d8 (Surr)	97		80 - 120	
4-Bromofluorobenzene (Surr)	92		73 - 120	
Dibromofluoromethane (Surr)	99		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-136145-12 Date Sampled: 05/15/2018 0000

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33158.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1726 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		77 - 120	
Toluene-d8 (Surr)	98		80 - 120	
4-Bromofluorobenzene (Surr)	91		73 - 120	
Dibromofluoromethane (Surr)	98		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-0203

Lab Sample ID: 480-136145-13 Date Sampled: 05/15/2018 1720

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33159.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1753 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		77 - 120	
Toluene-d8 (Surr)	97		80 - 120	
4-Bromofluorobenzene (Surr)	92		73 - 120	
Dibromofluoromethane (Surr)	97		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9112D

Lab Sample ID: 480-136145-14 Date Sampled: 05/16/2018 0835

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33160.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1820 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		77 - 120	
Toluene-d8 (Surr)	94		80 - 120	
4-Bromofluorobenzene (Surr)	89		73 - 120	
Dibromofluoromethane (Surr)	96		75 - 123	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9114S

Lab Sample ID: 480-136145-15 Date Sampled: 05/16/2018 0845

Client Matrix: Water Date Received: 05/17/2018 1700

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-415447 Instrument ID: HP5973P Prep Method: 5030C Prep Batch: N/A Lab File ID: P33161.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 05/21/2018 1847 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	0.55	J	0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		77 - 120
Toluene-d8 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	87		73 - 120
Dibromofluoromethane (Surr)	98		75 - 123

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8807S

Lab Sample ID: 480-136145-1 Date Sampled: 05/15/2018 0845

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4084.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 0735 Final Weight/Volume: 1 mL Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

F1ep Date. 05/21/2010 0749	injection volume. 2 ut			
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	93		46 - 120)
2-Fluorobiphenyl	98		48 - 120)
. 	404		EO 400	•

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8806S

Lab Sample ID: 480-136145-2 Date Sampled: 05/15/2018 0920

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4085.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 0804 Final Weight/Volume: 1 mL

Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

00/2 // 20 / 00 / 10		,		_ v_	
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accep	tance Limits	
Nitrobenzene-d5	88		46 - 12	20	
2-Fluorobiphenyl	96		48 - 12	20	
p-Terphenyl-d14	110		59 - 13	36	

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9110S

Lab Sample ID: 480-136145-3 Date Sampled: 05/15/2018 1210

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4086.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 0832 Final Weight/Volume: 1 mL Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

Frep Date: 03/21/2010 0/49	injection volume. 2 dc			
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
ndeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	91		46 - 120)
2-Fluorobiphenyl	95		48 - 120)
. .	407		50 404	•

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: DUP-051518

Lab Sample ID: 480-136145-4 Date Sampled: 05/15/2018 0000

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4087.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 0901 Final Weight/Volume: 1 mL Pren Date: 05/21/2018 0749 Injection Volume

Prep Date: 05/21/2018 0749 Injection Volume: 2 uL					
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accepta	ance Limits	
Nitrobenzene-d5	97		46 - 120)	
2-Fluorobiphenyl	102		48 - 120)	
				_	

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	97		46 - 120
2-Fluorobiphenyl	102		48 - 120
p-Terphenyl-d14	109		59 - 136

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-0201

Lab Sample ID: 480-136145-5 Date Sampled: 05/15/2018 1335

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4088.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 0929 Final Weight/Volume: 1 mL
Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

	·		
Result (ug/L)	Qualifier	MDL	RL
ND		0.41	5.0
ND		0.38	5.0
ND		0.28	5.0
ND		0.36	5.0
ND		0.47	5.0
ND		0.34	5.0
ND		0.35	5.0
ND		0.73	5.0
ND		0.33	5.0
ND		0.42	5.0
ND		0.40	5.0
ND		0.36	5.0
ND		0.47	5.0
ND		0.76	5.0
ND		0.44	5.0
ND		0.34	5.0
%Rec	Qualifier	Acceptance	Limits
86		46 - 120	
92		48 - 120	
100		59 - 136	
	ND N	ND N	ND 0.41 ND 0.38 ND 0.28 ND 0.36 ND 0.47 ND 0.34 ND 0.35 ND 0.73 ND 0.42 ND 0.40 ND 0.36 ND 0.47 ND 0.76 ND 0.76 ND 0.34 ND 0.34 WRec Qualifier Acceptance 86 46 - 120 92 48 - 120

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8604S

Lab Sample ID: 480-136145-6 Date Sampled: 05/15/2018 1305

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4089.D Dilution: Initial Weight/Volume: 250 mL 1.0

Analysis Date: 05/24/2018 0957 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 05/21/2018 0749 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	5.5		0.41	5.0
Acenaphthylene	0.50	J	0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	0.97	J	0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	97		46 - 120	0
2-Fluorobiphenyl	100		48 - 120	0
- 1 144	407			_

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-8808S

Lab Sample ID: 480-136145-7 Date Sampled: 05/15/2018 1435

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4090.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1026 Final Weight/Volume: 1 mL Injection Volume: Prep Date: 05/21/2018 0749 2 uL

		,00		
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	97		46 - 120	0
2-Fluorobiphenyl	102		48 - 120	0
n Tamahamul d4.4	110		FO 424	•

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9502S

Lab Sample ID: 480-136145-8 Date Sampled: 05/15/2018 1445

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4091.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1055 Final Weight/Volume: 1 mL
Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

	,	don volume.	Z UL
Result (ug/L)	Qualifier	MDL	RL
ND		0.41	5.0
ND		0.38	5.0
ND		0.28	5.0
ND		0.36	5.0
ND		0.47	5.0
ND		0.34	5.0
ND		0.35	5.0
ND		0.73	5.0
ND		0.33	5.0
ND		0.42	5.0
ND		0.40	5.0
ND		0.36	5.0
ND		0.47	5.0
ND		0.76	5.0
ND		0.44	5.0
ND		0.34	5.0
%Rec	Qualifier	Accept	ance Limits
98		46 - 12	0
101		48 - 12	0
95		59 - 13	6
	ND N	ND N	ND 0.41 ND 0.38 ND 0.28 ND 0.36 ND 0.47 ND 0.34 ND 0.35 ND 0.73 ND 0.42 ND 0.40 ND 0.36 ND 0.47 ND 0.76 ND 0.44 ND 0.34 %Rec Qualifier Accept 98 46 - 12 101 48 - 12

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: PTMW-0202

Lab Sample ID: 480-136145-9 Date Sampled: 05/15/2018 1520

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4092.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1124 Final Weight/Volume: 1 mL
Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	63		0.41	5.0
Acenaphthylene	0.62	J	0.38	5.0
Anthracene	0.64	J	0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	0.55	J	0.40	5.0
Fluorene	11		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	7.8		0.76	5.0
Phenanthrene	2.1	J	0.44	5.0
Pyrene	0.51	J	0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	94		46 - 120	0
2-Fluorobiphenyl	100		48 - 120	0
p-Terphenyl-d14	100		59 - 130	6

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9111S

Lab Sample ID: 480-136145-10 Date Sampled: 05/15/2018 1625

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4093.D Dilution: Initial Weight/Volume: 250 mL 1.0

Analysis Date: 05/24/2018 1153 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 05/21/2018 0749 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	2.5	J	0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
ndeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	95		46 - 120	0
2-Fluorobiphenyl	99		48 - 120	0
Ternhenyl-d14	106		50 13	£

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9112S

Lab Sample ID: 480-136145-11 Date Sampled: 05/15/2018 1645

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4094.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1221 Final Weight/Volume: 1 mL Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

F1ep Date. 05/21/2010 0749		iiijec	dion volume.	Z UL
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	97		46 - 120)
2-Fluorobiphenyl	103		48 - 120)
. 🛨	405		EO 400	•

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-0203

Lab Sample ID: 480-136145-13 Date Sampled: 05/15/2018 1720

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4095.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1250 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 05/21/2018 0749 2 uL

1 10p Bate. 00/2 1/2010 07 10		nijoo	don volumo.	Z UL
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	105		46 - 120)
2-Fluorobiphenyl	113		48 - 120)
n Tornhanyl d14	126		EQ 120	2

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	105		46 - 120
2-Fluorobiphenyl	113		48 - 120
p-Terphenyl-d14	126		59 - 136

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9112D

Lab Sample ID: 480-136145-14 Date Sampled: 05/16/2018 0835

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4096.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1318 Final Weight/Volume: 1 mL Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

F1ep Date. 05/21/2010 0749		iiijec	dion volume.	2 UL
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	96		46 - 120)
2-Fluorobiphenyl	101		48 - 120)
. 🛨	00		EO 400	2

59 - 136

Client: New York State Electric & Gas Job Number: 480-136145-1

Client Sample ID: MW-9114S

p-Terphenyl-d14

Lab Sample ID: 480-136145-15 Date Sampled: 05/16/2018 0845

Client Matrix: Water Date Received: 05/17/2018 1700

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-415983 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-415454 Lab File ID: W4097.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 05/24/2018 1348 Final Weight/Volume: 1 mL

Prep Date: 05/21/2018 0749 Injection Volume: 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	96		46 - 120	0
2-Fluorobiphenyl	99		48 - 120	0

102

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TestAmerica

252765

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING TestAmerica Laboratories, Inc.

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feshersk, NY 14228 Phone: 716, 691, 2600 Fax: 716, 691, 7991

Phone: 716, 691, 2600 Fax: 716, 691, 7991	Regulatory Program:	gram:	NDDEC	Vada	Othor	-	が対象を	TestAmerica Laboratories, Inc	li c
Client Contact	Project Manager:			نب	anton	Date:	***	COC No:	
Company Name: Accordis (Niebrales Source)	Tel/Fax:	1	7	Lab Contact:	W.C. M.C.	Carrier:		of 2 COCs	
ich devel 42 2rde	Std 30 Analysis Turnaround Time	urnaround Time	0	100			480-136145 COC	Sampler:	
ite/Zip: Fastock/NV/ NYSD	CALENDAR DAYS	WORKING DAYS	DAYS	012				For Lab Use Only:	
ie:	TAT if different from Below		ente	8 - (N				Walk-in Client:	-
	. 2	2 weeks words	ट्	/Y) #\	_			Lab Sampling:	-
		1 week				-		Joh / SDG No.	
HO4		1 day	əjaw						
		Sample	IS I						
Sample Identification	Sample Sample Date Time	Type (C=Comp, G=Grab) Matrix	rix Cont. Filtere	875 875				Sample Specific Notes:	
MW-8807S	5/15/16 08415	G. Wake	180 15	×				ms/msp	
	1 0920			edop#100					5
MIN- 91105	1240		J.						100
Dur -051518	Water of the same		תו						
age - 020- mue	1335		N						
S +0 98 - m55	1305		in						1
900-8808S	98h1		S						
S 2056 - MISS	SHH	goran	IJ						
PT/M-0202	1520		U						
MW-91113	1625	>	N	→					-
mw-91125	Shall Bridg	9	N	×					
TRIP BLAMK	-	ON commo .	water 1	×					100
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other	5=NaOH; 6= Other_								
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please	Please List any EPA Waste	Codes for the sample in the	ample in the	Sample Dis	sposal (A fee ma	ly be assessed	if samples are retain	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
				*	rec Contact		1		
Non-Hazard Flammable Skin Irritant	Poison B	Unknown		Return	Return to Client	Disposal by Lab	Archive for	Months	
Special Instructions/QC Requirements & Comments:									

2.1,32,4.3

1019

5.17.1

Company

Therm ID No.

21,22, 43

Cooler Temp.

Date/Time:

Company:

Company

Received in Laboratory by:

Received by

Date/Time:

Company: Company:

% 2018 300 %

Date/Time:

Custody Seal No.:
Company:

Custody Seals Intact:

Relinquished by: SCACO

lest America Funerst 10 Hazelmood Brive

Chain of Custody Record

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TestAmerico

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

TAL-8210 (0713) Sample Specific Notes: COCs Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) of 2 For Lab Use Only. Nalk-in Client: ab Sampling: Job / SDG No. Carrier: Site Contact: N: Males Boy'r Date: * Per contract Other: Lab Contact: RCRA Perform MS / MSD (Y / N) Filtered Sample (Y/N) Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the NPDES # of Cont. 15 157 en WORKING DAYS make WAKE Matrix Makel Analysis Turnaround Time Regulatory Program: Dw Type (C=Comp, G=Grab) Sample TAT if different from Below 2 weeks 2 days 1 week 1 day Silving 0845 2680 Sample Time Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other CALENDAR DAYS Project Manager: Silvers Sample 5/18/18 Tel/Fax: famerst, NV 14228 Phone: 716.691.2600 Fax: 716.691.7991 MYSE G CHANTE Address: 295 moodelise dive Sample Identification Client Contact City/State/Zip: Fair pure INY ossible Hazard Identification 585-782 Company Name: Accordis U Project Name: Phone: #0d Fax: Site: Page 557 of 558

Company Received in Laboratory by

Therm ID No.:

Cooler Temp. (°C): Obs'd:2,1,3,1,4,3 Corr'd:

Company:

Received by:

Custody Seal No.

No

Yes

Custody Seals Intact:

Relinquished by:

Company:

greads Company:

Received by

Shops no 7011 41:05

Date/Time:

Date/Time:

Company:

30/2018 by:

Archive for

Disposal by Lab

Return to Client

Poison B

Special Instructions/QC Requirements & Comments:

Flammable

Non-Hazard

Comments Section if the lab is to dispose of the sample.

5.17.16

2.1, 5.2, 43



NYSEG Oneonta Former MGP Site

DATA USABILITY SUMMARY REPORT

Oneonta, New York

Volatile and Semivolatile Analysis

SDG #480-145319-1

Analyses Performed By: TestAmerica Laboratories Amherst, New York

Report #31388R Review Level: Tier III

Project: B0013118.0008.00002

SUMMARY

This data usability summary report (DUSR) summarizes the review of Sample Delivery Group (SDG) # 480-145319-1 for samples collected in association with the NYSEG Oneonta Former MGP Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

			Sample	Parent		А	nalysis	6	
Sample ID	Lab ID	Matrix	Collection Date	Sample	voc	svoc	РСВ	MET	MISC
MW-8604S	480-145319-1	Water	11/13/2018		Х	Х			
MW-9114S	480-145319-2	Water	11/14/2018		Х	Х			
MW-8806S	480-145319-3	Water	11/13/2018		Х	Х			
MW-9110S	480-145319-4	Water	11/14/2018		Х	Х			
MW-0201	480-145319-5	Water	11/13/2018		Х	Х			
MW-8807S	480-145319-6	Water	11/14/2018		Х	Х			
MW-9111S	480-145319-7	Water	11/13/2018		Х	Х			
MW-0203	480-145319-8	Water	11/13/2018		Х	Х			
MW-8808S	480-145319-9	Water	11/13/2018		Х	Х			
MW-9112S	480-145319-10	Water	11/13/2018		Х	Х			
MW-9112D	480-145319-11	Water	11/13/2018		Х	Х			
MW-9502S	480-145319-12	Water	11/14/2018		Х				
PTMW-0202	480-145319-13	Water	11/13/2018		Х	Х			
DUP-111318	480-145319-14	Water	11/13/2018	PTMW-0202	Х	Х			
TRIP BLANK	480-145319-15	Water	11/14/2018		Х	Х			

Note:

1. Matrix spike/matrix spike duplicate was performed on sample location MW-8604S for VOCs and SVOCs.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

	Rep	orted		mance ptable	Not
Items Reviewed	No	Yes	No	Yes	Required
Sample receipt condition		Х		Х	
Requested analyses and sample results		Х		Х	
Master tracking list		Х		Х	
4. Methods of analysis		Х		Х	
5. Reporting limits		Х		Х	
6. Sample collection date		Х		Х	
7. Laboratory sample received date		Х		Х	
8.Sample preservation verification (as applicable)		Х		Х	
Sample preparation/extraction/analysis dates		Х		Х	
10. Fully executed Chain-of-Custody (COC) form		Х		Х	
11. Narrative summary of QA or sample problems provided		Х		Х	
12. Data Package Completeness and Compliance		Х		Х	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines (October 1999) and applicable Region II SOPs. USEPA NFGs and Region II SOPs were followed for qualification purposes.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.
Soil		48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

Note:

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
PTMW-0202/DUP-111318	Benzene	160	160	0.0%
	o-Xylene	5.3	5.5	AC
	Xylenes, Total	5.3 J	5.5 J	AC

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-0201	Benzene	250 E	290 D	290 D
	Ethylbenzene	140 E	140 D	140 D
	o-Xylene	100 E	99 D	99 D
	Xylenes, Total	120 E	120 D	120 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

11. System Performance and Overall Assessment

The laboratory noted that sample locations PTMW-0202 (480-145319-13) and DUP-111318 (480-145319-14) were analyzed at a dilution to bring the concentration of target analytes within the calibration range. The dilution resulted in elevated reporting limits (RLs).

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260		oorted		eptable	Not
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETR	Y (GC/M	S)			
Tier II Validation					
Holding times		Х		X	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks					
C. Trip blanks		Х		Х	
Laboratory Control Sample (LCS)		Х		Х	
Laboratory Control Sample Duplicate(LCSD)					
LCS/LCSD Precision (RPD)					
Matrix Spike (MS)		Х		Х	
Matrix Spike Duplicate(MSD)		Х		Х	
MS/MSD Precision (RPD)		Х		Х	
Field/Lab Duplicate (RPD)		Х		Х	
Surrogate Spike Recoveries		Х		Х	
Dilution Factor		Х		Х	
Moisture Content	Х				Х
Tier III Validation					
System performance and column resolution		Х		Х	
Initial calibration %RSDs		Х		Х	
Continuing calibration RRFs		Х		Х	
Continuing calibration %Ds		Х		Х	
Instrument tune and performance check		Х		Х	
Ion abundance criteria for each instrument used		Х		Х	
Internal standard		Х		Х	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		Х		Х	
B. Quantitation Reports		Х		Х	

VOCs: SW-846 8260		Reported		mance ptable	Not
		Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
C. RT of sample compounds within the established RT windows		X		Х	
D. Transcription/calculation errors present		Х		Х	
E. Reporting limits adjusted to reflect sample dilutions		Х		Х	

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270 Soil from extraction		7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C
		14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
	Acenaphthene	88	60	
	Anthracene	1.7 J	1.7 J	
	Fluoranthene	1.6 J	1.4 J	
PTMW-0202/DUP-111318	Fluorene	21	17	AC
	Naphthalene	99	85	
	Phenanthrene	7.8	7.2	
	Pyrene	1.5 J	1.5 J	

Notes:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-0201	Naphthalene	88 E	360 D	360 D
PTMW-0202	Acenaphthene	72 E	88 D	88 D
F 1 10100-0202	Naphthalene	58 E	99 D	99 D
DUP-111318	Naphthalene	50 E	85 D	85 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270	Rep	orted		mance otable	Not
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROM	ETRY (GC	S/MS)			
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		Х	
Laboratory Control Sample Duplicate(LCSD) %R					Х
LCS/LCSD Precision (RPD)					Х
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	Х				Х
Tier III Validation					
System performance and column resolution		Х		Х	
Initial calibration %RSDs		X		х	
Continuing calibration RRFs		Х		Х	
Continuing calibration %Ds		Х		Х	
Instrument tune and performance check		X		Х	
lon abundance criteria for each instrument used		Х		Х	
Internal standard		Х		Х	
Compound identification and quantitation					
F. Reconstructed ion chromatograms		X		Х	
G. Quantitation Reports		Х		Х	
H. RT of sample compounds within the established RT windows		х		Х	

SVOCs: SW-846 8270		Reported		Performance Acceptable		Not		
		No	Yes	No	Yes	Required		
GAS	GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)							
I.	Quantitation transcriptions/calculations		Х		Х			
J.	Reporting limits adjusted to reflect sample dilutions		x		X			

Notes:

%RSD Relative standard deviation

%R Percent recovery

RPD Relative percent difference

%D Percent difference

DATA USABILITY SUMMARY REPORT

SAMPLE COMPLIANCE REPORT

Sample	Sampling Backers				Compliancy ¹					
Delivery Group (SDG)	Date	Protocol	Sample ID	Matrix	VOC	svoc	РСВ	MET	MISC	Noncompliance
	11/13/2018	USEPA/ SW846	MW-8604S	Water	Yes	Yes				
	11/14/2018	USEPA/ SW846	MW-9114S	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	MW-8806S	Water	Yes	Yes				
	11/14/2018	USEPA/ SW846	MW-9110S	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	MW-0201	Water	Yes	Yes				
	11/14/2018	USEPA/ SW846	MW-8807S	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	MW-9111S	Water	Yes	Yes				
480-145319-1	11/13/2018	USEPA/ SW846	MW-0203	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	MW-8808S	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	MW-9112S	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	MW-9112D	Water	Yes	Yes				
	11/14/2018	USEPA/ SW846	MW-9502S	Water	Yes					
	11/13/2018	USEPA/ SW846	PTMW-0202	Water	Yes	Yes				
	11/13/2018	USEPA/ SW846	DUP-111318	Water	Yes	Yes				
	11/14/2018	USEPA/ SW846	TRIP BLANK	Water	Yes	Yes				

Note:

DATA USABILITY SUMMARY REPORT

1	Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as
	"no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

DATA USABILITY SUMMARY REPORT

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE:

DATE: December 31, 2018

Jugh c. House

PEER REVIEW: Dennis Capria

DATE: January 2, 2019

CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8604S

Lab Sample ID: 480-145319-1 Date Sampled: 11/13/2018 0950

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2027.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1523 Final Weight/Volume: 5 mL

Prep Date: 11/19/2018 1523

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	2.4		0.41	1.0	
Toluene	ND		0.51	1.0	
Ethylbenzene	ND		0.74	1.0	
m-Xylene & p-Xylene	ND		0.66	2.0	
o-Xylene	ND		0.76	1.0	
Xylenes, Total	ND		0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
Toluene-d8 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	112		73 - 120
Dibromofluoromethane (Surr)	106		75 - 123

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9114S

Lab Sample ID: 480-145319-2 Date Sampled: 11/14/2018 1035

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446498 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2046.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/20/2018 0007 Final Weight/Volume: 5 mL

Prep Date: 11/20/2018 0007

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		77 - 120	
Toluene-d8 (Surr)	96		80 - 120	
4-Bromofluorobenzene (Surr)	103		73 - 120	
Dibromofluoromethane (Surr)	104		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8806S

Lab Sample ID: 480-145319-3 Date Sampled: 11/13/2018 1215

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2028.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1549 Initial Weight/Volume: 5 mL

Prep Date: 11/19/2018 1549

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		77 - 120
Toluene-d8 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	109		73 - 120
Dibromofluoromethane (Surr)	109		75 - 123

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9110S

Lab Sample ID: 480-145319-4 Date Sampled: 11/14/2018 0845

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446498 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2047.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/20/2018 0033 Final Weight/Volume: 5 mL

Prep Date: 11/20/2018 0033

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		77 - 120	
Toluene-d8 (Surr)	97		80 - 120	
4-Bromofluorobenzene (Surr)	109		73 - 120	
Dibromofluoromethane (Surr)	105		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-0201

Lab Sample ID: 480-145319-5 Date Sampled: 11/13/2018 1535

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2029.D Dilution: 1.0 Initial Weight/Volume: 5 mL Analysis Date: 11/19/2018 1616

Analysis Date: 11/19/2018 1616 Prep Date: 11/19/2018 1616

Analyte		Result (ug/L)	Qualifier	MDL	RL	
Benzene	290	250	DE	0.41	1.0	
Toluene		5.0		0.51	1.0	
Ethylbenzene		140	D-E-	0.74	1.0	
m-Xylene & p-Xylene		21		0.66	2.0	
o-Xylene	99	-100	D -E-	0.76	1.0	
Xylenes, Total		120	D E	0.66	2.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
Toluene-d8 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	105		75 - 123

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-0201

Lab Sample 10: 480-145319-5 Date Sampled: 11/13/2018 1535

Client Matrix: Vater Date Received: 11/15/2018 1000

Oliciti Matrix.	VVater				Date Net	Delved. 11/10/2010 1000			
8260C Volatile Organic Compounds by GC/MS									
Analysis Method: Prep Method: Dilution:	8260C 5030C 10	Analysis Batch: Prep Batch:	480-446498 N/A	L	nstrument ID: ab File ID: nitial Weight/Volume:	HP5973C C2048.D 5 mL			
Analysis Date: Prep Date:	11/20/2018 0100 11/20/2018 0100	Run Type:	DL		inal Weight/Volume:	5 mL			
Analyte		Result (u	g/L)	Qualifier	MDL	RL			
Benzene		290			4.1	10			
Toluene		ND			5.1	10			
Ethylbenzene		140			7.4	10			
m-Xylene & p-Xyle	ene	20			6.6	20			
o-Xylene		99			7.6	10			
Xylenes, Total		120			6.6	20			
Surrogate		%Rec		Qualifier	Acceptar	ice Limits			
1,2-Dichloroethan	e-d4 (Surr)	110			77 - 120				
Toluene-d8 (Surr)		95			80 - 120				
4-Bromofluoroben	zene (Surr)	108			73 - 120				
Dibromofluoromet	hane (Surr)	106			75 - 123				

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8807S

Lab Sample ID: 480-145319-6 Date Sampled: 11/14/2018 0905

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446498 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2049.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/20/2018 0126 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	103		75 - 123

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9111S

Lab Sample ID: 480-145319-7 Date Sampled: 11/13/2018 1120

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2030.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1642 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		77 - 120	
Toluene-d8 (Surr)	96		80 - 120	
4-Bromofluorobenzene (Surr)	112		73 - 120	
Dibromofluoromethane (Surr)	103		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-0203

Lab Sample ID: 480-145319-8 Date Sampled: 11/13/2018 0906

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2031.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1709 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		77 - 120	
Toluene-d8 (Surr)	100		80 - 120	
4-Bromofluorobenzene (Surr)	109		73 - 120	
Dibromofluoromethane (Surr)	108		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8808S

Lab Sample ID: 480-145319-9 Date Sampled: 11/13/2018 1420

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2032.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1736 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
Toluene-d8 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	114		73 - 120
Dibromofluoromethane (Surr)	108		75 - 123

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9112S

Lab Sample ID: 480-145319-10 Date Sampled: 11/13/2018 1643

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2033.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1803 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	106		77 - 120	
Toluene-d8 (Surr)	92		80 - 120	
4-Bromofluorobenzene (Surr)	99		73 - 120	
Dibromofluoromethane (Surr)	115		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9112D

Lab Sample ID: 480-145319-11 Date Sampled: 11/13/2018 1543

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2034.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1830 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		77 - 120
Toluene-d8 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	110		73 - 120
Dibromofluoromethane (Surr)	111		75 - 123

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9502S

Lab Sample ID: 480-145319-12 Date Sampled: 11/14/2018 0857

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

480-446498 Analysis Method: 8260C Analysis Batch: Instrument ID: HP5973C 5030C Prep Method: Prep Batch: N/A Lab File ID: C2050.D Dilution: Initial Weight/Volume: 5 mL 1.0 Analysis Date: 11/20/2018 0153 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	113		77 - 120	
Toluene-d8 (Surr)	98		80 - 120	
4-Bromofluorobenzene (Surr)	106		73 - 120	
Dibromofluoromethane (Surr)	116		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: PTMW-0202

Lab Sample ID: 480-145319-13 Date Sampled: 11/13/2018 1310

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2035.D Dilution: 4.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1857 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	160		1.6	4.0	
Toluene	ND		2.0	4.0	
Ethylbenzene	ND		3.0	4.0	
m-Xylene & p-Xylene	ND		2.6	8.0	
o-Xylene	5.3		3.0	4.0	
Xylenes, Total	5.3	J	2.6	8.0	

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	108		77 - 120	
Toluene-d8 (Surr)	100		80 - 120	
4-Bromofluorobenzene (Surr)	109		73 - 120	
Dibromofluoromethane (Surr)	107		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: DUP-111318

Lab Sample ID: 480-145319-14 Date Sampled: 11/13/2018 0000

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446341 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2036.D Dilution: 4.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/19/2018 1923 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Benzene	160		1.6	4.0	
Toluene	ND		2.0	4.0	
Ethylbenzene	ND		3.0	4.0	
m-Xylene & p-Xylene	ND		2.6	8.0	
o-Xylene	5.5		3.0	4.0	
Xylenes, Total	5.5	J	2.6	8.0	

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	108		77 - 120	
Toluene-d8 (Surr)	97		80 - 120	
4-Bromofluorobenzene (Surr)	106		73 - 120	
Dibromofluoromethane (Surr)	106		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-145319-15 Date Sampled: 11/14/2018 0000

Client Matrix: Water Date Received: 11/15/2018 1000

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C Analysis Batch: 480-446498 Instrument ID: HP5973C Prep Method: 5030C Prep Batch: N/A Lab File ID: C2051.D Dilution: 1.0 Initial Weight/Volume: 5 mL

Analysis Date: 11/20/2018 0220 Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Benzene	ND		0.41	1.0
Toluene	ND		0.51	1.0
Ethylbenzene	ND		0.74	1.0
m-Xylene & p-Xylene	ND		0.66	2.0
o-Xylene	ND		0.76	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	106		77 - 120	
Toluene-d8 (Surr)	92		80 - 120	
4-Bromofluorobenzene (Surr)	107		73 - 120	
Dibromofluoromethane (Surr)	107		75 - 123	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8604S

Lab Sample ID: 480-145319-1 Date Sampled: 11/13/2018 0950

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7349.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/27/2018 1916 Final Weight/Volume: 1 mL

Prep Date: 11/16/2018 1411 Injection Volume: 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	7.6		0.41	5.0
Acenaphthylene	1.1	J	0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	0.52	J	0.40	5.0
Fluorene	0.92	J	0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	0.46	J	0.34	5.0
Surrogate	%Rec	Qualifier Acceptance Limits		
Nitrobenzene-d5	84	46 - 120		
2-Fluorobiphenyl	82		48 - 12	0
p-Terphenyl-d14	77		59 - 13	6

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9114S

Lab Sample ID: 480-145319-2 Date Sampled: 11/14/2018 1035

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Batch: 480-447666 Analysis Method: 8270D Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7350.D Dilution: Initial Weight/Volume: 250 mL 1.0

Analysis Date: 11/27/2018 1946 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 11/16/2018 1411 2 uL

1776/2010 1111		injodichi voldine. 2 de			
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accepta	ance Limits	
Nitrobenzene-d5	89		46 - 120	0	
2-Fluorobiphenyl	87		48 - 120	0	
n Tornhonyl d14	77		EO 12	6	

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	89		46 - 120
2-Fluorobiphenyl	87		48 - 120
p-Terphenyl-d14	77		59 - 136

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8806S

Lab Sample ID: 480-145319-3 Date Sampled: 11/13/2018 1215

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7351.D Dilution: 1.0 Initial Weight/Volume: 250 mL

 Analysis Date:
 11/27/2018 2016
 Final Weight/Volume:
 1 mL

 Prep Date:
 11/16/2018 1411
 Injection Volume:
 2 uL

Frep Date. 11/10/2016 1411	injection volume. 2 ul				
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accept	tance Limits	
Nitrobenzene-d5	78		46 - 12	20	
2-Fluorobiphenyl	77		48 - 12	20	
p-Terphenyl-d14	76		59 - 13	36	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9110S

Lab Sample ID: 480-145319-4 Date Sampled: 11/14/2018 0845

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Batch: 480-447666 Analysis Method: 8270D Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7352.D Dilution: Initial Weight/Volume: 250 mL 1.0

Analysis Date: 11/27/2018 2045 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 11/16/2018 1411 2 uL

1776/2010 1111		injodion volume.			
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accepta	ance Limits	
Nitrobenzene-d5	78		46 - 120	0	
2-Fluorobiphenyl	78		48 - 120	0	
n Tornhanyl d14	70		EO 12	6	

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	78		46 - 120
2-Fluorobiphenyl	78		48 - 120
p-Terphenyl-d14	79		59 - 136

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-0201

Lab Sample ID: 480-145319-5 Date Sampled: 11/13/2018 1535

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7353.D Dilution: 1.0 Initial Weight/Volume: 250 mL Analysis Date: 11/27/2018 2114

 Analysis Date:
 11/27/2018 2114
 Final Weight/Volume:
 1 mL

 Prep Date:
 11/16/2018 1411
 Injection Volume:
 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	360 88	D -E	0.76	5.0	
Phenanthrene	ND	5	0.44	5.0	
Pyrene	ND		0.34	5.0	

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	74		46 - 120
2-Fluorobiphenyl	79		48 - 120
p-Terphenyl-d14	72		59 - 136

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-0201

Lab Sample ID: 480-145319-5 Date Sampled: 11/13/2018 1535

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivo	latile Organic	Compounds	(GC/MS)

8270D Analysis Method: Analysis Batch: 480-447880 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7373.D Dilution: 10 Initial Weight/Volume: 250 mL

Analysis Date: 11/28/2018 1821 Run Type: Final Weight/Volume: DL 1 mL

Prep Date: 11/16/2018 1411 Injection Volume: 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		4.1	50
Acenaphthylene	ND		3.8	50
Anthracene	ND		2.8	50
Benzo(a)anthracene	ND		3.6	50
Benzo(a)pyrene	ND		4.7	50
Benzo(b)fluoranthene	ND		3.4	50
Benzo(g,h,i)perylene	ND		3.5	50
Benzo(k)fluoranthene	ND		7.3	50
Chrysene	ND		3.3	50
Dibenz(a,h)anthracene	ND		4.2	50
Fluoranthene	ND		4.0	50
Fluorene	ND		3.6	50
Indeno(1,2,3-c,d)pyrene	ND		4.7	50
Naphthalene	360		7.6	50
Phenanthrene	ND		4.4	50
Pyrene	ND		3.4	50
Surrogate	%Rec	Qualifier	Acceptano	ce Limits
Nitrobenzene-d5	69		46 - 120	
a =				

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	69		46 - 120
2-Fluorobiphenyl	80		48 - 120
p-Terphenyl-d14	70		59 - 136

11/30/2018

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8807S

TestAmerica Buffalo

Lab Sample ID: 480-145319-6 Date Sampled: 11/14/2018 0905

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Batch: 480-447666 Analysis Method: 8270D Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7354.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/27/2018 2143 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 11/16/2018 1411 2 uL

injection volume. 2 de			
Result (ug/L)	Qualifier	MDL	RL
ND		0.41	5.0
ND		0.38	5.0
ND		0.28	5.0
ND		0.36	5.0
ND		0.47	5.0
ND		0.34	5.0
ND		0.35	5.0
ND		0.73	5.0
ND		0.33	5.0
ND		0.42	5.0
ND		0.40	5.0
ND		0.36	5.0
ND		0.47	5.0
ND		0.76	5.0
ND		0.44	5.0
ND		0.34	5.0
%Rec	Qualifier	Accept	tance Limits
79		46 - 12	20
78		48 - 12	20
74		59 - 13	86
	ND N	Result (ug/L) Qualifier ND	Result (ug/L) Qualifier MDL ND 0.41 ND 0.38 ND 0.28 ND 0.36 ND 0.47 ND 0.34 ND 0.35 ND 0.73 ND 0.33 ND 0.42 ND 0.42 ND 0.40 ND 0.36 ND 0.47 ND 0.36 ND 0.36 ND 0.36 ND 0.36 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.36 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.36 ND 0.37 ND 0.37 ND 0.47 ND 0.37 ND 0.37 ND 0.47 ND 0.37 ND 0.47 ND 0.37 ND 0.47 ND 0.37 ND 0.47 ND 0.36 ND 0.47 ND 0.47 ND 0.36 ND 0.47 ND 0.47 ND 0.44 ND 0.34

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9111S

Lab Sample ID: 480-145319-7 Date Sampled: 11/13/2018 1120

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7355.D Dilution: 1.0 Initial Weight/Volume: 250 mL

 Analysis Date:
 11/27/2018 2213
 Final Weight/Volume:
 1 mL

 Prep Date:
 11/16/2018 1411
 Injection Volume:
 2 uL

- P	,				
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	4.5	J	0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accepta	ance Limits	
Nitrobenzene-d5	78		46 - 120)	
2-Fluorobiphenyl	79		48 - 120)	
-				_	

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-0203

Lab Sample ID: 480-145319-8 Date Sampled: 11/13/2018 0906

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7356.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/27/2018 2242 Final Weight/Volume: 1 mL Prep Date: 11/16/2018 1411 Injection Volume: 2 uL

F1ep Date. 11/10/2010 1411	injection volume. 2 ul			
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
ndeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	86		46 - 120)
2-Fluorobiphenyl	85		48 - 120)
. 	00		EO 400	2

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-8808S

Lab Sample ID: 480-145319-9 Date Sampled: 11/13/2018 1420

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7357.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/27/2018 2311 Final Weight/Volume: 1 mL Injection Volume: Prep Date: 11/16/2018 1411 2 uL

	ngoston rotamo u_			
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	91		46 - 120)
2-Fluorobiphenyl	89		48 - 120)
n Tamahamul aldd	0.0		FO 424	•

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9112S

Lab Sample ID: 480-145319-10 Date Sampled: 11/13/2018 1643

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Batch: 480-447666 Analysis Method: 8270D Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7358.D Dilution: Initial Weight/Volume: 250 mL 1.0

Analysis Date: 11/27/2018 2340 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 11/16/2018 1411 2 uL

11/10/2010 1111		injodion volume. 2 de			
Analyte	Result (ug/L)	Qualifier	MDL	RL	
Acenaphthene	ND		0.41	5.0	
Acenaphthylene	ND		0.38	5.0	
Anthracene	ND		0.28	5.0	
Benzo(a)anthracene	ND		0.36	5.0	
Benzo(a)pyrene	ND		0.47	5.0	
Benzo(b)fluoranthene	ND		0.34	5.0	
Benzo(g,h,i)perylene	ND		0.35	5.0	
Benzo(k)fluoranthene	ND		0.73	5.0	
Chrysene	ND		0.33	5.0	
Dibenz(a,h)anthracene	ND		0.42	5.0	
Fluoranthene	ND		0.40	5.0	
Fluorene	ND		0.36	5.0	
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0	
Naphthalene	ND		0.76	5.0	
Phenanthrene	ND		0.44	5.0	
Pyrene	ND		0.34	5.0	
Surrogate	%Rec	Qualifier	Accepta	ance Limits	
Nitrobenzene-d5	89		46 - 120)	
2-Fluorobiphenyl	89		48 - 120)	
n Tornhanyl d14	02		EO 120	2	

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	89		46 - 120
2-Fluorobiphenyl	89		48 - 120
p-Terphenyl-d14	83		59 - 136

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9112D

Lab Sample ID: 480-145319-11 Date Sampled: 11/13/2018 1543

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7359.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/28/2018 0009 Final Weight/Volume: 1 mL

Prep Date: 11/16/2018 1411 Injection Volume: 2 uL

Fiep Date. 11/10/2016 1411		injec	uon voiume.	2 UL
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Accept	tance Limits
Nitrobenzene-d5	87		46 - 12	20
2-Fluorobiphenyl	88		48 - 12	20
p-Terphenyl-d14	87		59 - 13	36

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: MW-9502S

Lab Sample ID: 480-145319-12 Date Sampled: 11/14/2018 0857

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7360.D Dilution: 1.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/28/2018 0038 Final Weight/Volume: 1 mL Pren Date: 11/16/2018 1411 Injection Volume

Prep Date: 11/16/2018 1411		injectio	n volume:	2 UL
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	ND		0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	ND		0.40	5.0
Fluorene	ND		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	ND		0.76	5.0
Phenanthrene	ND		0.44	5.0
Pyrene	ND		0.34	5.0
Surrogate	%Rec	Qualifier	Acceptance	e Limits
Nitrobenzene-d5	90		46 - 120	
2-Fluorobiphenyl	88		48 - 120	

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5	90		46 - 120
2-Fluorobiphenyl	88		48 - 120
p-Terphenyl-d14	77		59 - 136

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: PTMW-0202

Lab Sample ID: 480-145319-13 Date Sampled: 11/13/2018 1310

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7361.D Dilution: Initial Weight/Volume: 250 mL 1.0 Analysis Date:

11/28/2018 0107 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 11/16/2018 1411 2 uL

Analyte		Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	88	-72 -	D E	0.41	5.0
Acenaphthylene		ND		0.38	5.0
Anthracene		1.7	J	0.28	5.0
Benzo(a)anthracene		ND		0.36	5.0
Benzo(a)pyrene		ND		0.47	5.0
Benzo(b)fluoranthene		ND		0.34	5.0
Benzo(g,h,i)perylene		ND		0.35	5.0
Benzo(k)fluoranthene		ND		0.73	5.0
Chrysene		ND		0.33	5.0
Dibenz(a,h)anthracene		ND		0.42	5.0
Fluoranthene		1.6	J	0.40	5.0
Fluorene		21		0.36	5.0
Indeno(1,2,3-c,d)pyrene		ND		0.47	5.0
Naphthalene	99	-58	D -E-	0.76	5.0
Phenanthrene		7.8		0.44	5.0
Pyrene		1.5	J	0.34	5.0
Surrogate		%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5		85		46 - 12)
2-Fluorobiphenyl		88		48 - 12)
p-Terphenyl-d14		69		59 - 13	3

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: PTMW-0202

Lab Sample ID: 480-145319-13 Date Sampled: 11/13/2018 1310

Client Matrix: Date Received: 11/15/2018 1000 Water

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447880 Instrument ID: HP5973W 3510C Prep Method: Prep Batch: 480-446121 Lab File ID: W7374.D Dilution: 5.0 Initial Weight/Volume: 250 mL

Analysis Date: 11/28/2018 1850 Run Type: DL Final Weight/Volume: 1 mL Prep Date: 11/16/2018 1411 Injection Volume: 2 uL

RL Analyte Result (ug/L) Qualifier MDL Acenaphthene 88 2.1 25 Acenaphthylene 25 ND 1.9 25 J Anthracene 1.5 1.4 25 Benzo(a)anthracene ND 1.8 Benzo(a)pyrene ND 2.4 25 25 Benzo(b)fluoranthene ND 1.7 Benzo(g,h,i)perylene ND 25 1.8 Benzo(k)fluoranthene 25 ND 3.7 Chrysene 25 ND 1.7 Dibenz(a,h)anthracene ND 2.1 25 Fluoranthene ND 2.0 25 Fluorene 19 J 1.8 25 Indeno(1,2,3-c,d)pyrene ND 2.4 25 Naphthalene 99 3.8 25 Phenanthrene 7.5 J 2.2 25 Pyrene ND 1.7 25 Surrogate %Rec Qualifier Acceptance Limits 46 - 120 Nitrobenzene-d5 78 2-Fluorobiphenyl 86 48 - 120

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: **DUP-111318**

Lab Sample ID: 480-145319-14 Date Sampled: 11/13/2018 0000

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447666 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7362.D Dilution: Initial Weight/Volume: 250 mL 1.0

Analysis Date: 11/28/2018 0136 Final Weight/Volume: 1 mL Prep Date: Injection Volume: 11/16/2018 1411 2 uL

- r		,		
Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	60		0.41	5.0
Acenaphthylene	ND		0.38	5.0
Anthracene	1.7	J	0.28	5.0
Benzo(a)anthracene	ND		0.36	5.0
Benzo(a)pyrene	ND		0.47	5.0
Benzo(b)fluoranthene	ND		0.34	5.0
Benzo(g,h,i)perylene	ND		0.35	5.0
Benzo(k)fluoranthene	ND		0.73	5.0
Chrysene	ND		0.33	5.0
Dibenz(a,h)anthracene	ND		0.42	5.0
Fluoranthene	1.4	J	0.40	5.0
Fluorene	17		0.36	5.0
Indeno(1,2,3-c,d)pyrene	ND		0.47	5.0
Naphthalene	85 – 50 –	D E	0.76	5.0
Phenanthrene	7.2		0.44	5.0
Pyrene	1.5	J	0.34	5.0
Surrogate	%Rec	Qualifier	Accepta	ance Limits
Nitrobenzene-d5	67		46 - 12	0
2-Fluorobiphenyl	69		48 - 12	0
—	00		=0 40	•

59 - 136

Client: New York State Electric & Gas Job Number: 480-145319-1

Client Sample ID: DUP-111318

p-Terphenyl-d14

Lab Sample ID: 480-145319-14 Date Sampled: 11/13/2018 0000

Client Matrix: Water Date Received: 11/15/2018 1000

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270D Analysis Batch: 480-447880 Instrument ID: HP5973W Prep Method: 3510C Prep Batch: 480-446121 Lab File ID: W7375.D Dilution: 5.0 Initial Weight/Volume: 250 mL

 Analysis Date:
 11/28/2018 1919
 Run Type:
 DL
 Final Weight/Volume:
 1 mL

 Prep Date:
 11/16/2018 1411
 Injection Volume:
 2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	74		2.1	25
Acenaphthylene	ND		1.9	25
Anthracene	1.7	J	1.4	25
Benzo(a)anthracene	ND		1.8	25
Benzo(a)pyrene	ND		2.4	25
Benzo(b)fluoranthene	ND		1.7	25
Benzo(g,h,i)perylene	ND		1.8	25
Benzo(k)fluoranthene	ND		3.7	25
Chrysene	ND		1.7	25
Dibenz(a,h)anthracene	ND		2.1	25
Fluoranthene	ND		2.0	25
Fluorene	17	J	1.8	25
Indeno(1,2,3-c,d)pyrene	ND		2.4	25
Naphthalene	85		3.8	25
Phenanthrene	7.2	J	2.2	25
Pyrene	ND		1.7	25
Surrogate	%Rec	Qualifier	Accept	ance Limits
Nitrobenzene-d5	63		46 - 12	0
2-Fluorobiphenyl	70		48 - 12	O

67

Chain of Custody Record

Phone (716) 691-2600 Fax (716) 691-7991

Amherst, NY 14228-2298

10 Hazelwood Drive

TestAmerica Buffalo

TestAmerica

M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2SO3
S - HZSO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - PH 4-5
Z - other (specify) THE LEADER IN ENVIRONMENTAL TESTING 480-145319 COC Special Instructions/Note: Company Months Company Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

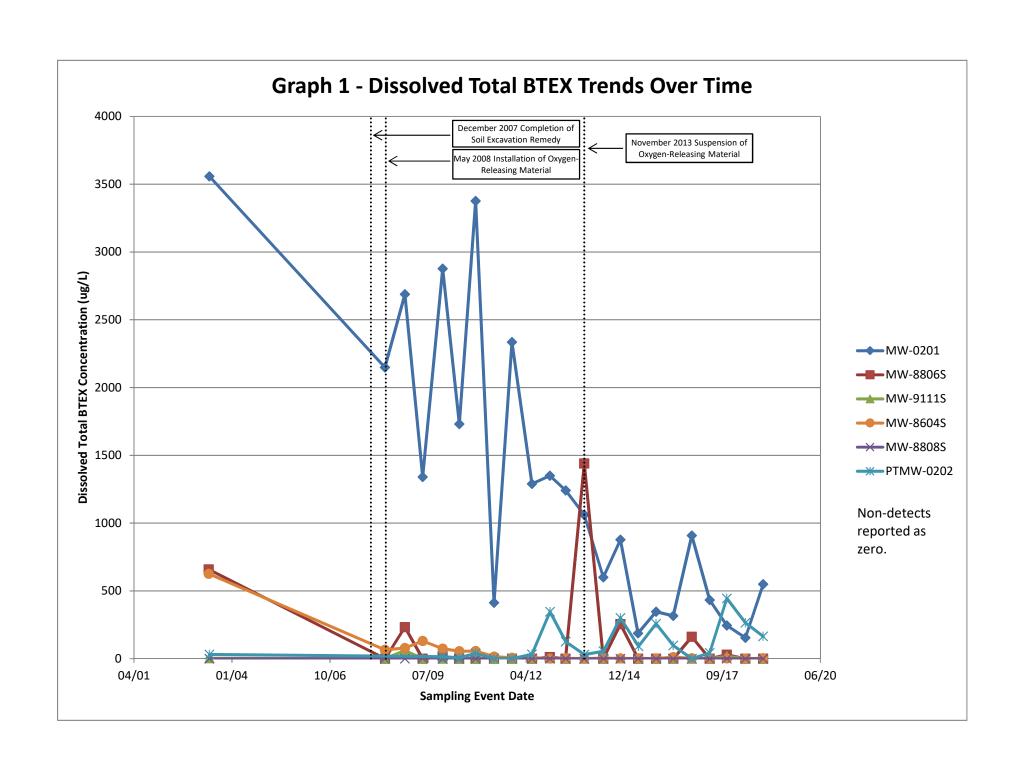
Return To Client Authority 480-121087-15280.1 Preservation Codes 1000 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
G - Amchlor
H - Ascorbic Acid Page: Page 1 of 2 Job#: J - D! Water K - EDTA L - EDA 8 # Total Number of containers 13 non S Date/Time: Method of Shipment: Carrier Tracking No(s): **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements melissa.deyo@testamericainc.com sived by all Received by: 8560C - BTEX - 8260 Sample: Eyene Love / Wan Meanhapeyo, Melissa L 89litslovime2 HA9 - 0072 (old no self) GEMISM michely Time: Field Filtered Sample (Yes or No.) Company (Wewater, Sesolid, Oewastafoll, BT=TIssue, A=Air Preservation Code: Water Matrix Water Company (C=comp, G=grab) Radiological Sample P Type Phone: 585-886-7747 0 J wo #: NYSEG Oneonta/John Ruspantini 300 ৬ 1420 090 6 0960 Sample Time 0845 15.35 1035 1215 2000 1120 1643 Stonderd Date: FAT Requested (days): Huknown Due Date Requested: P Sample Date 11/13/18 11/13/18 11/13/14 PO#: 4504318887 11/13/18 11/13/19 11/13/18 Date/Time: 11/14/18 11/13/18 Project #: 48004125 11/11 | H | N Date/Time: Poison B CRyan Skin Irritant Arcadis 295 Woodcliff Drive 3rd Floor, Suite 301 35 Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. たわたた Fermen Flammable Nicholas.beyrle@arcadis-us.com Possible Hazard Identification 588-880-Empty Kit Relinquished by: Client Information Custody Seals Intact: Sample Identification Over ha Mr. Nicholas Beyrle Company: ARCADIS U.S. Inc A Yes A No NYSEG - Oneonta Non-Hazard Relinquished by: elinquished by: MW-8604S NY, 14450 AMA-9109S MW-9114S WW-8806S MW-9110S MW-8807S MW-9111S WW-8808S WW-9112S MW-0203 **WW-0201** Fairport State, Zip:

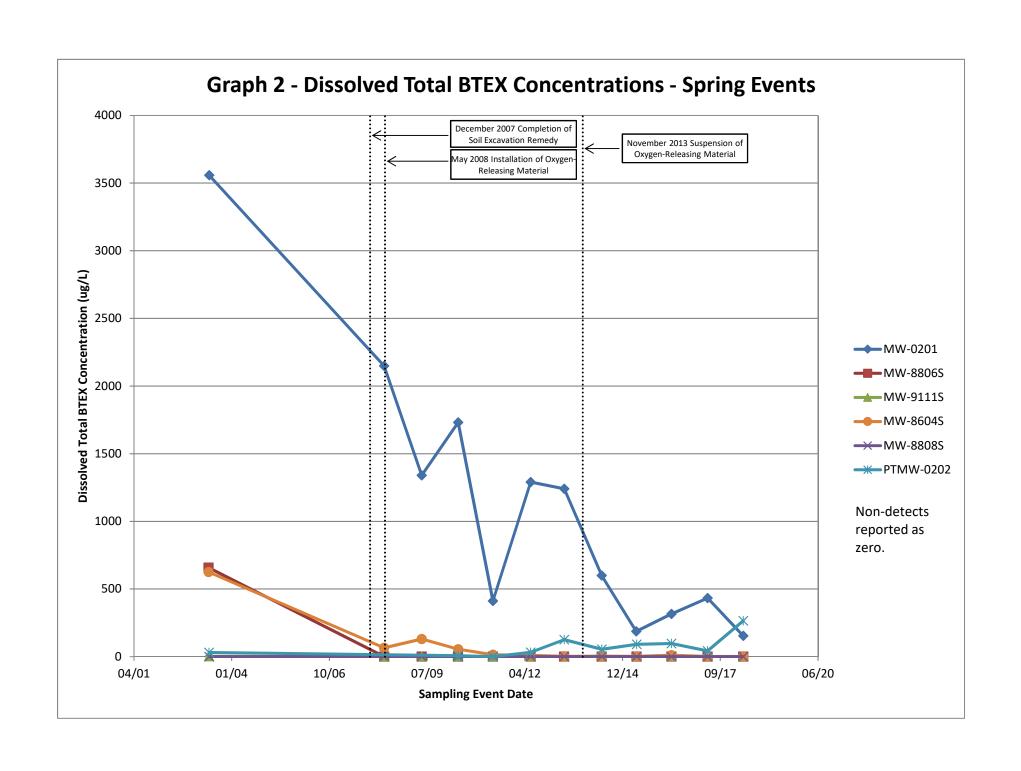
0 Page 524 of 526 Ver: 08/04/2016

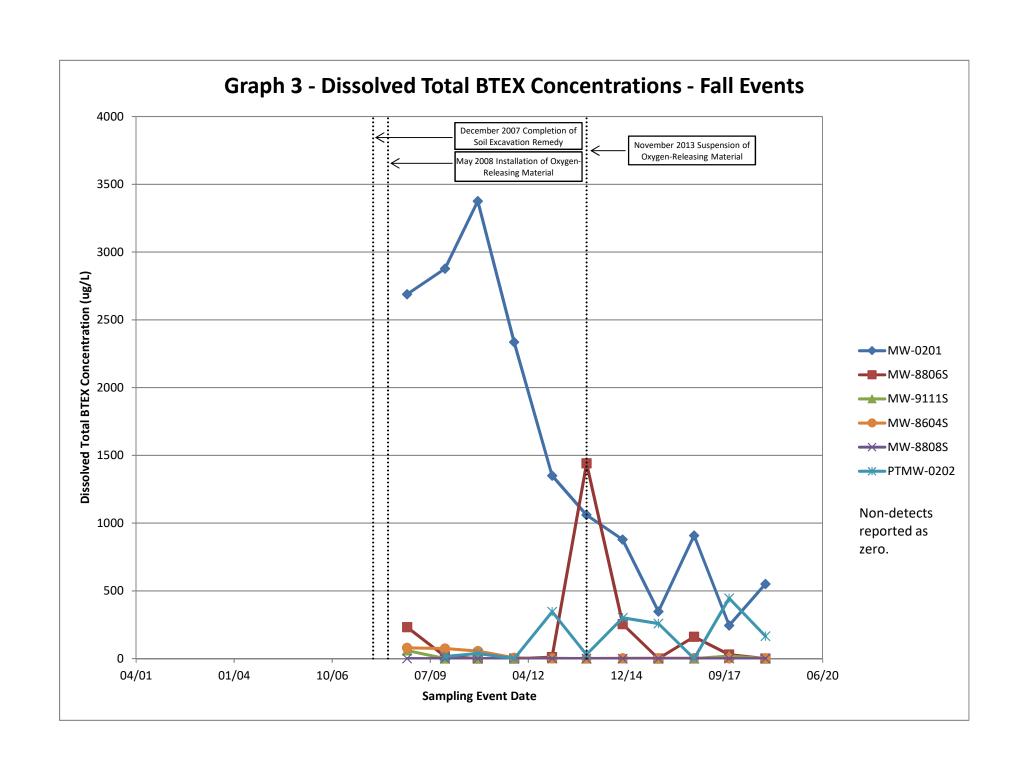
TestAmerica Buffalo										
To hazelwood Drive Amherst, NY 14228-2298	O	hain o	Chain of Custody Record	ody Re	cor	75			[estA	TestAmerica
Phone (716) 691-2600 Fax (716) 691-7991	- 1								THE LEADER IN	THE LEADER IN ENVIRONMENTAL TESTING
Client Information	Ryan Clare	re / Dan	n Moanda	Lab PM:	Lab PM: Devo Melicea I	_	Carrier Tracking No(s)	s):	COC No:	
Client Contact: Mr. Nicholas Beyrle	Phone:	1 .	472	E-Mail:					480-121087-15280.2 Page:	280.2
Company: ARCADIS U.S. Inc			1		a.ueyu@	menssa.ueyo@testamencame.com			Page 2 of 2 Job #:	
Address: Arcadis 295 Woodcliff Drive 3rd Floor, Suite 301	Due Date Requested:	ä		11000	100	Analysis	Analysis Requested		Preservation Codes	ides:
Critical Control Contr	TAT Requested (days):	ys):			700				A - HCL B - NaOH	M - Hexane N - None
NY, 14450					J.EV			44	D - Nitric Acid	O - Asnao2 P - Na2O4S
rnone:	PO#: 4504318887			T	la la			W O	F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4
Email: Nicholas.beyrle@arcadis-us.com	WO #: NYSEG Oneonta/John Ruspantini	/John Ruspa	antini	10.					H - Ascorbic Acid f - Ice	T - TSP Dodecahydrate U - Acetone
Project Name: NYSEG - Oneonta	Project #: 48004125				10 80			siners	J - DI Water K - EDTA I - FDA	V - MCAA W - pH 4-5
France alread Fame, HCP	SSOW#:			Jours	ea) as	092		i contra	Other:	Z - ou lei (specity)
				Matrix (Wewater, Sesoild	M/2M m	8 - ХЭТ8 - :		lumber o		
Sample Identification	Sample Date	Sample	(C=comp, G=grab) BT	-	рецо	20928		i Isto	G	;
WW.8112D	XE	1	# 1	n Code:	Ž	A		īX	Special in	Special instructions/Note:
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WWV=0301	1811111		\$	Weter	ř	*				
MW-8502S	D81 H1 11	1881	5	Water	×	×,×		7 L		
21	11/13/18	1310	J	Water	×	X		1		
8-111314	11/13/18	1	હ	Water	X	X		26		
TRIP BLANK	W 14/18	1	1	Water		×		o		
				Water						
				Water						
								E A		
Identification					Sample	Disposal (A fee may	bę assessed if sample	es are retained	flonder than 4	monthi
Deliverable Requested: I, III, IV, Other (specify)	Poison B CUnknown] [Radiological		֓֟֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֟֓֓֓֟֓֓֓֓	Return To Client Oisposal By Lab Archive For Mon	Disposal By Lab	Archiv	e For	Months
Empty Kit Relinquished by:		Date.		ľ	obecia	Special instructions/QC Requirements:	ements:			
4	Date/Time:	ان			ime:	10	Method of Shipment:	nent:		
Relinquished by:	11 14 11 S Date/Time:	136	30C	Acad S Company	ž. Š.	Received by:	Date	Date/Tim/: 5/18	3/000	Company
Relinquished by:	Date/Time:		5	Company	Rece	Received by:	Date	Date/Time:		Company
(1)					000	Cooler Temperature(s) °C and Other Remarks			ĸ	o libraria
A fes A No						Donate Comment	##	1.1	1-6	
										Ver: 08/04/2016

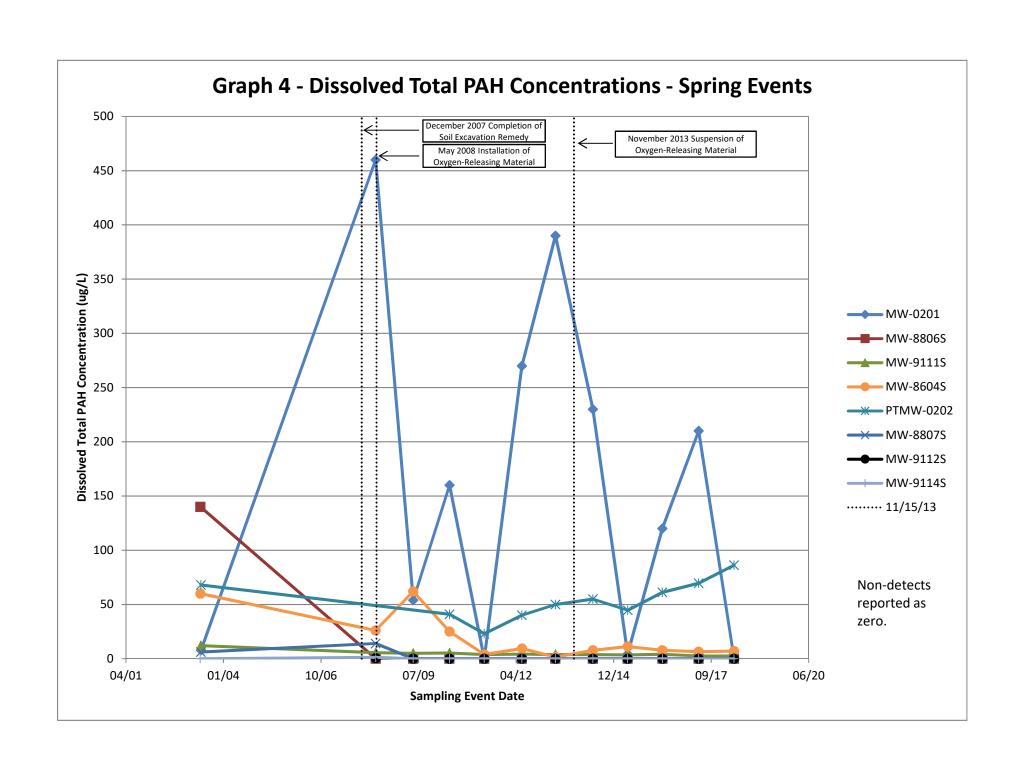
APPENDIX C

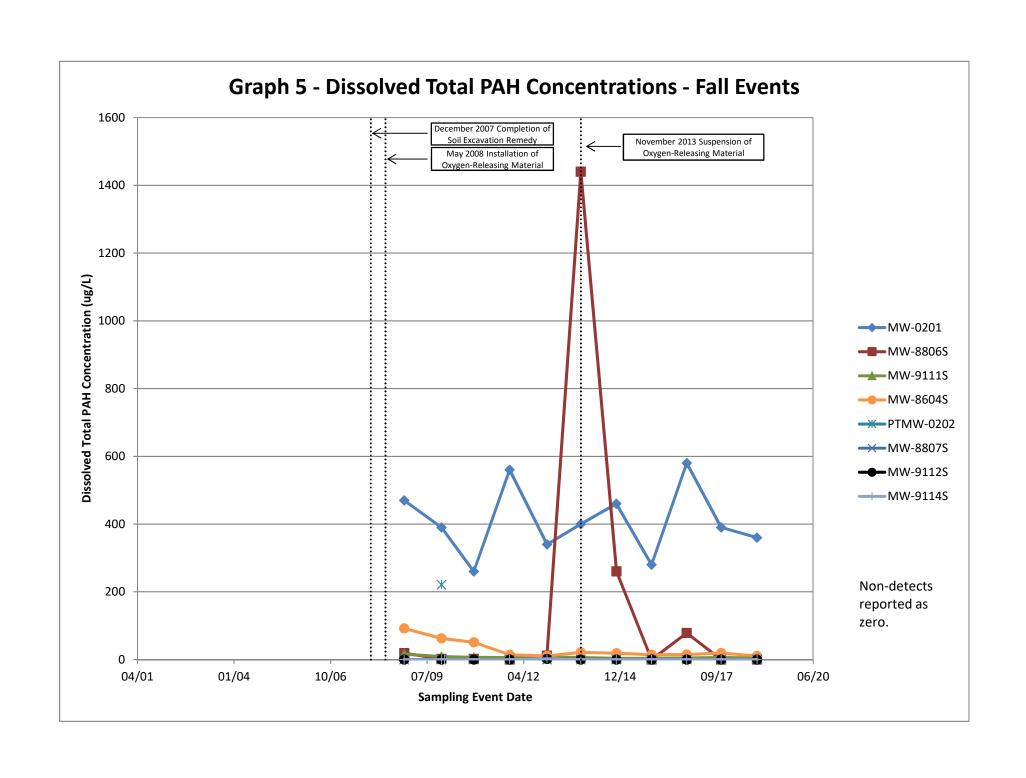
Graphs











APPENDIX D

Site Inspection Logs

CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 1

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: NNW

COMMENT: Picture showing soil coverage for the Easter Plant Area (EPA). Photo indicates cover in good condition; no repair needed.

SITE NAME: Oneonta Former MGP Site SITE LOCATION: Oneonta, New York



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 2

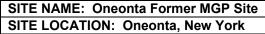
PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: NW

COMMENT: Picture

showing soil coverage for the EPA. Photo indicates cover in good condition; no repair

needed.





CLIENT: NYSEG
PROJECT#: B0013118.0005

PHOTOGRAPH #: 3

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: W

COMMENT: Picture showing soil coverage for the EPA. Photo indicates cover in good condition; no repair needed.

SITE NAME: Oneonta Former MGP Site SITE LOCATION: Oneonta, New York

SITE NAME: Oneonta Former MGP Site



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 4

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: S

COMMENT: Picture

showing roadway traversing the EPA. Photo indicates cover in good condition; no

repair needed.



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 5

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: W

COMMENT: Picture showing riprap coverage for Mill Race Creek embankment in the vicinity of the Western Plant Area (WPA). Coverage appears in good condition, no repair needed.

SITE NAME: Oneonta Former MGP Site

SITE LOCATION: Oneonta, New York



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 6

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: W

COMMENT: Picture showing riprap coverage for Mill Race Creek embankment from a different angle in the vicinity of the WPA. Coverage appears in good condition, no repair needed.



CLIENT: NYSEG

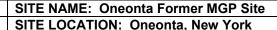
PROJECT#: B0013118.0005

PHOTOGRAPH #: 7

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: SSE

COMMENT: Picture showing parking lot that covers the WPA. Photo indicates cover is in good condition; no repair needed.





CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 8

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: SSW

COMMENT: Picture showing continuation of the parking lot that covers the WPA. Photo indicates cover is in good condition; no repair needed.



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 9

PHOTOGRAPHER: LMM

DATE: 05/14/2018 DIRECTION: WSW

COMMENT: Picture showing continuation of the parking lot that covers the WPA. Photo indicates cover is in good condition; no repair needed.



SITE LOCATION: Oneonta, New York



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 10 PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: W

COMMENT: Picture showing continuation of the parking lot that covers the WPA and the riprap covered embankment of the Mill Race Creek. Photo indicates cover is in good condition; no repair needed.



CLIENT: NYSEG

PROJECT#: B0013118.0005

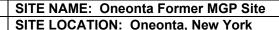
PHOTOGRAPH #: 11

PHOTOGRAPHER: LMM DATE: 05/14/2018

DIRECTION: NE

close-up of riprap embankment cover for the Mill Race Creek looking northeast. Photo indicates cover is in good condition; no

repair needed.



SITE NAME: Oneonta Former MGP Site



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH#: 12 PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: SW

COMMENT: Picture showing

close-up of riprap

embankment cover for the Mill Race Creek, walking trail and NYSEG storage shed looking southeast. Photo indicates cover in front of shed is in good condition; no

repair needed.



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 13

PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: S

COMMENT: Picture showing concrete sidewalks and ballpark fencing covering the WPA. Photo indicates cover is in good condition; no repair needed.

SITE NAME: Oneonta Former MGP Site SITE LOCATION: Oneonta, New York



CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH #: 14 PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIDECTION: E

DIRECTION: E

COMMENT: Picture showing coverage over the WPA. Parking lot, sidewalk and grass area appear in good condition; no repair needed.



CLIENT: NYSEG

SITE NAME: Oneonta Former MGP Site

PROJECT#: B0013118.0005

PHOTOGRAPH #: 15

PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: SSE

COMMENT: Picture showing coverage over WPA. Grass area and pavement behind bleachers appear in good condition; no repair needed.



CLIENT: NYSEG

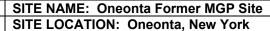
PROJECT#: B0013118.0005

PHOTOGRAPH #: 16 PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: E

COMMENT: Picture showing paved area behind bleachers and pavement directly over the permeable wall. Photo indicates cover is in good condition; no repair needed.





CLIENT: NYSEG

PROJECT#: B0013118.0005

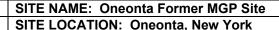
PHOTOGRAPH #: 17

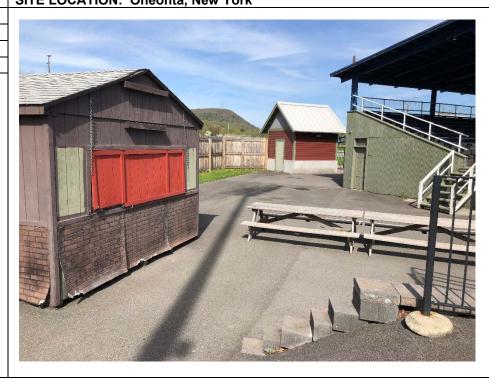
PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: E

comment: Picture showing continuation of paved area behind bleachers and pavement directly over the permeable wall. Photo indicates cover is in good condition; no repair needed.





CLIENT: NYSEG

PROJECT#: B0013118.0005

PHOTOGRAPH#: 16 PHOTOGRAPHER: LMM

DATE: 05/14/2018

DIRECTION: NE

COMMENT: Picture showing

cover for the very

southeastern corner of the WPA and the permeable wall. Photo indicates cover is in

good condition; no repair

needed.



APPENDIX E

Well Photographic Logs

CLIENT: NYSEG	SITE NAME: Oneonta Former MGP Site		
PROJECT#:	SITE LOCATION: Oneonta, New York		
B0013118.0005	SITE LOCATION. Offeonia, New York		
WELL ID: MW-8604S			
PHOTOGRAPHER: LMM			
DATE: 05/14/18			
DIRECTION: NA			
COMMENT: Photograph of MW-8604S. Well is a stick-up and in good condition with a lockable lid.	NYSEG one onta Date: 5-14-18 T.D.: Mw. 86045		

CLIENT: NYSEG	SITE NAME: Oneonta Former MGP Site		
PROJECT#: B0013118.0005	SITE LOCATION: Oneonta, New York		
WELL ID : MW-8806S			
PHOTOGRAPHER: LMM			
DATE: 05/14/18			
DIRECTION: NA			
comment: Photograph of MW-8806S. Well is in good condition with locking cap.	NYSEG one on ta Date: 5 14-18 T.D: MW-8800s		





CLIENT: NYSEG
PROJECT#:
B0013118.0005

WELL ID: MW-9109S
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT: Photograph showing MW-9109S. Well has an existing pump assembly in it. Well is in good condition with locking well cap.

NYSEG
SITE NAME: One on tage of the content of the conten

SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG

PROJECT#:
B0013118.0005

WELL ID: MW-9110S

PHOTOGRAPHER: LMM

DATE: 05/14/18

DIRECTION: NA

COMMENT: Photograph
showing MW-9110S. Well
has existing pump
assembly in it. Well is in
good condition with locking



well cap.

CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 **WELL ID: MW-9111S** PHOTOGRAPHER: LMM DATE: 05/14/18 **DIRECTION: NA COMMENT:** Photograph of MW-9111S. Well has existing pump assembly in it. Well is in good condition NYSEG one onta Date: 5-14-18 with locking well cap. ID: MW-9111S

SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG PROJECT#: B0013118.0005 WELL ID: MW-9112S PHOTOGRAPHER: LMM DATE: 05/14/18 DIRECTION: NA COMMENT: Photograph showing MW9112S. Well has existing pump assembly in it. Well is in good condition with locking well cap.



SITE NAME: Oneonta Former MGP Site

SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG PROJECT#: B0013118.0005

WELL ID: MW-9112D

PHOTOGRAPHER: LMM DATE: 05/14/18

DIRECTION: NA

COMMENT:

Photograph showing MW-9112D. Well has existing pump assembly in it. Well is in good condition with locking cap.



CLIENT: NYSEG PROJECT#: B0013118.0005

WELL ID: MW-9114S PHOTOGRAPHER: LMM

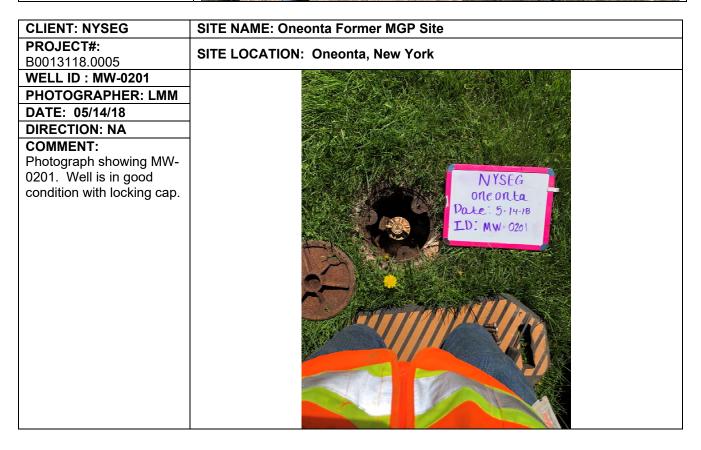
DATE: 05/14/18 **DIRECTION: NA**

COMMENT: Photograph showing MW-9114S. Well is in good condition with

locking cap.



CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 **WELL ID: MW-9502S PHOTOGRAPHER: LMM** DATE: 05/14/18 **DIRECTION: NA COMMENT:** Photograph showing MW-9502S. Well is in good condition with locking well cap. NYSEG oneonta Date: 5-14-18 ID: MW 95025



CLIENT: NYSEG
PROJECT#:
B0013118.0005

WELL ID: MW-0203
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA

COMMENT:
Photograph showing MW-0203. Well is in good condition with locking cap.

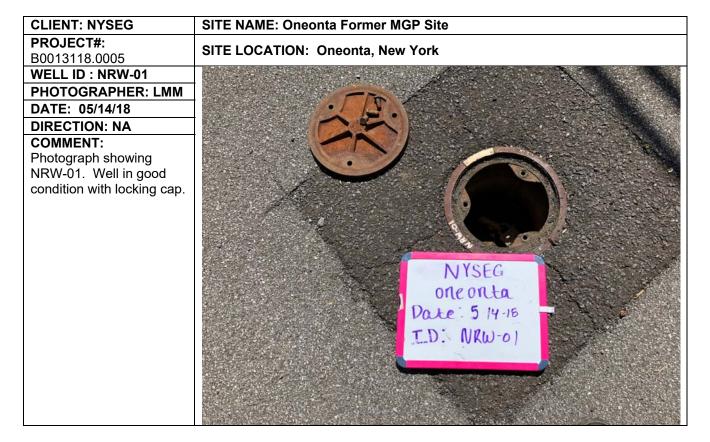
CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: MW-0301
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT: Photograph
showing MW-0301. Well is

in good condition with

locking cap.



CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 WELL ID: PTMW-0202 **PHOTOGRAPHER: LMM** DATE: 05/14/18 **DIRECTION: NA COMMENT:** Photograph showing PTMW-0202. Well is in good condition with locking cap. NYSEG oneonta Date: 5-14-18 ID: PTMW-0202



SITE NAME: Oneonta Former MGP Site

PROJECT#:
B0013118.0005
WELL ID: NRW-02

PHOTOGRAPHER: LMM

DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing NRW-02. Well in good condition with locking cap.



PROJECT#:
B0013118.0005
WELL ID: NRW-03

PHOTOGRAPHER: LMM

DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing NRW-03. Concrete apron surrounding flush-mount road box is weathered and cracked, however still structurally sound. Well has locking cap.



PROJECT#:
B0013118.0005

WELL ID : NRW-04 PHOTOGRAPHER: LMM

DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing NRW-04. Well in good condition with locking cap.

SITE NAME: Oneonta Former MGP Site



PROJECT#:
B0013118.0005
WELL ID: NRW-05

PHOTOGRAPHER: LMM

DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing NRW-05. Well in good condition with locking cap. Vault is in good condition.

SITE NAME: Oneonta Former MGP Site



SITE NAME: Oneonta Former MGP Site

SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: PMW-01
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing PMW-01. Well in good condition with locking cap.



CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: PMW-02
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing PMW-02. Well in good condition with locking cap.



CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 WELL ID: PMW-03 **PHOTOGRAPHER: LMM** DATE: 05/14/18 **DIRECTION: NA** COMMENT: Photograph showing PMW-03. Well in good condition with locking cap. NYSEG oneonta Date: 5 14-18 I.D. PM W-03



CLIENT: NYSEG

PROJECT#:
B0013118.0005

WELL ID: PMW-05
PHOTOGRAPHER: LMM

DATE: 05/14/18
DIRECTION: NA

COMMENT:
Photograph showing

PMW-05. Well in good

condition with locking cap.



CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: PMW-06
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing
PMW-06. Well in good

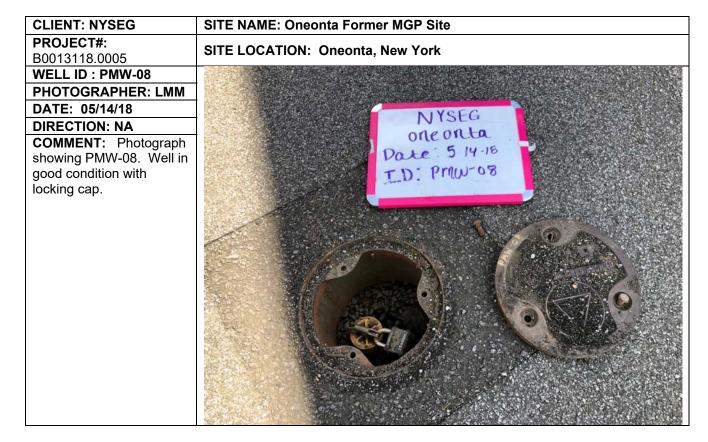
condition with locking cap.



SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: PMW-07
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing
PMW-07. Well in good condition with locking cap.

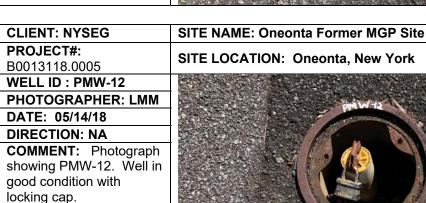
NYSEG
One onta
Date: 5 14-18
TD: Pmw-07



CLIENT: NYSEG	SITE NAME: Oneonta Former MGP Site		
PROJECT#: B0013118.0005	SITE LOCATION: Oneonta, New York		
WELL ID : PMW-09			
PHOTOGRAPHER: LMM			
DATE: 05/14/18			
DIRECTION: NA			
COMMENT: Photograph showing PMW-09. Well in good condition with locking cap.	NYSEG one on ta Date: 5 14-16 T.D. PM W-09		

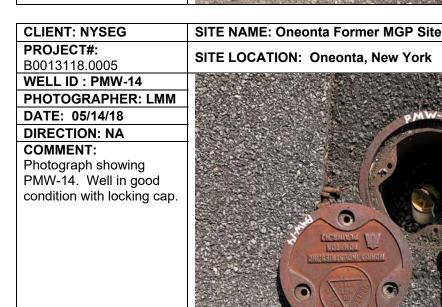
CLIENT: NYSEG	SITE NAME: Oneonta Former MGP Site		
PROJECT#: B0013118.0005	SITE LOCATION: Oneonta, New York		
WELL ID : PMW-10			
PHOTOGRAPHER: LMM			
DATE: 05/14/18			
DIRECTION: NA			
COMMENT: Photograph showing PMW-10. Well in good condition with locking cap.	NYSEG one on ta Pate: 5 14-18 LD: PMW-10		

CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: PMW-11
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing
PMW-11. Well in good
condition with locking cap.





CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 WELL ID: PMW-13 **PHOTOGRAPHER: LMM** DATE: 05/14/18 **DIRECTION: NA** COMMENT: Photograph showing PMW-13. Well in good condition with locking cap. NYSEG oneonta Date: 5 14-18 ID: PMW-13



NYSEG

Date: 5 14-18 I.D.: PMW-14

CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 **WELL ID : PZ-105 PHOTOGRAPHER: LMM** DATE: 05/14/18 **DIRECTION: NA** COMMENT: Photograph showing PZ-105. Well in good condition with locking cap. NYSEG oneonta Date: 5-14-18 ID: PZ-105

CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: PZ-0801
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing PZ0801. Well in good

condition with locking cap.

NYSEG one on ta Date 5 14-18 I.D.: Pt-0801

PROJECT#:
B0013118.0005

WELL ID: PZ-0802 PHOTOGRAPHER: LMM

DATE: 05/14/18 DIRECTION: NA

COMMENT:

Photograph showing PZ-0802. Concrete apron surrounding flush-mount road box is weathered and cracked, however still structurally sound. Well has locking cap.

SITE NAME: Oneonta Former MGP Site
SITE LOCATION: Oneonta, New York



CLIENT: NYSEG PROJECT#:

B0013118.0005

WELL ID : PZ-0803

PHOTOGRAPHER: LMM

DATE: 05/14/18
DIRECTION: NA
COMMENT:

Photograph showing PZ-0803. Concrete apron surrounding flush-mount road box is weathered and cracked, however still structurally sound. Well has locking cap.

SITE NAME: Oneonta Former MGP Site

SITE LOCATION: Oneonta, New York



CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 STAFF GAUGE ID: SG-105 PHOTOGRAPHER: LMM DATE: 05/14/18 **DIRECTION: NA** COMMENT: Photograph showing SG-10. Staff gauge is in good condition.

SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG PROJECT#: B0013118.0005

STAFF GAUGE ID: SG-107

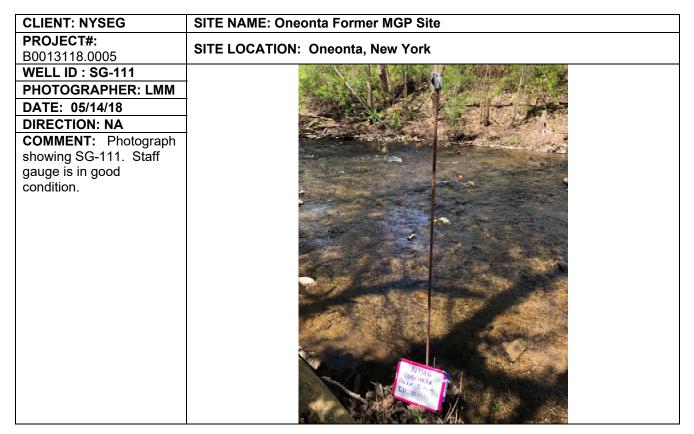
PHOTOGRAPHER: LMM DATE: 05/14/18

DIRECTION: NA COMMENT: Photograph showing SG-107. Measuring location is a hole drilled in the top of

the culvert. Staff gauge is in good condition.



CLIENT: NYSEG	SITE NAME: Oneonta Former MGP Site
PROJECT#:	SITE LOCATION: Oneonta, New York
B0013118.0005	
STAFF GAUGE ID: SG- 110	
PHOTOGRAPHER: LMM	多。在1000年代 共享 中国的1000年度
DATE: 05/14/18	
DIRECTION: NA	
COMMENT: Photograph	
showing SG-110. Staff	
gauge is in good condition.	
	Company of the Compan
	NESTO To one of the latest the la
	ED: 56 40



SITE NAME: Oneonta Former MGP Site **CLIENT: NYSEG** PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 WELL ID: AW-01 PHOTOGRAPHER: LMM **DATE: 05/14/18 DIRECTION: NA** COMMENT: Photograph showing AW-01. Well is in good condition. NYSEG oneonta ate: 5 14-18 ED: AW-01

SITE NAME: Oneonta Former MGP Site

CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: AW-02
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing AW-02. Well is in good condition.



CLIENT: NYSEG SITE NAME: Oneonta Former MGP Site PROJECT#: SITE LOCATION: Oneonta, New York B0013118.0005 WELL ID: AW-03 PHOTOGRAPHER: LMM **DATE: 05/14/18 DIRECTION: NA** COMMENT: Photograph showing AW-03. Well is in good condition. NYSEG oneonta Date: 5 14-18 ID: AW-03

SITE NAME: Oneonta Former MGP Site

SITE LOCATION: Oneonta, New York

CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: AW-04
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing AW04. Well is in good

condition.



CLIENT: NYSEG
PROJECT#:
B0013118.0005
WELL ID: AW-05
PHOTOGRAPHER: LMM
DATE: 05/14/18
DIRECTION: NA
COMMENT:
Photograph showing AW-05. Well is in good condition.

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APPENDIX F

Certification Statement



Appendix F Certification Statement

Based on information provided to NYSEG, NYSEG verifies that the site engineering controls described in the ROD (NYSDEC 2005) were in place during the reporting period, and has no knowledge that changes have occurred at the Oneonta Former MGP Site that would impair the ability of the engineering controls to protect public health and the environment, or constitute a violation or failure to comply with the operation and maintenance plan described in the *Site Management Plan*.

1-11-19

John J. Ruspantini, CHMM, PMP

NYSEG, Manager - Programs/Projects

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

- 1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.
- 2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.
- 3. If you <u>cannot</u> certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Sit	e No. 439	0001	Site Details	Box 1	
		- Oneonta MGP			
City Co	e Address: Jame y/Town: Oneont unty:Otsego e Acreage: 2.000		Zip Code: 13820		
Re	porting Period: [December 19, 2017 to D	ecember 19, 2018		
				YES	NO
1.	Is the information	on above correct?		X	
	If NO, include h	andwritten above or on	a separate sheet.		
2.		of the site property bee ment during this Report	en sold, subdivided, merged, or undergonding Period?	e a	×
3.	Has there been (see 6NYCRR 3		ne site during this Reporting Period		×
4.		al, state, and/or local pe perty during this Report	ermits (e.g., building, discharge) been issuing Period?	ied	X
			thru 4, include documentation or evide usly submitted with this certification fo		
5.	Is the site curre	ntly undergoing develop	oment?		X
			-		
				Box 2	
				YES	NO
6.		te use consistent with the dential, Commercial, an		P	
7.	Are all ICs/ECs	in place and functioning	g as designed?	×	
			ESTION 6 OR 7 IS NO, sign and date belicesT OF THIS FORM. Otherwise continu		
To	RNYSET	Hu Hludjoo	submitted along with this form to addre	ss these iss	sues.
Sig	nature of Owner,	Remedial Party or Desig	nated Representative Da	te	

SITE NO. 439001 Box 3

Description of Institutional Controls

<u>Parcel</u>

<u>Owner</u>

300.10-1-34

CITY OF ONEONTA

Institutional Control

Ground Water Use Restriction Soil Management Plan Landuse Restriction

Site Management Plan Monitoring Plan IC/EC Plan

Box 4

Description of Engineering Controls

<u>Parcel</u>

Engineering Control

300.10-1-34

Cover System

Subsurface Barriers
Vapor Mitigation — LISTED IN ROD BUT NOT

CURRENTLY REQUIRED

Periodic Review Report (PRR) Certification Statements

1.	I certify	by	checking	"YES"	below	that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES NO

f 0

- 2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
 - (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
 - (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
 - (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
 - (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
 - (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

LOU MAJER

Date

IC CERTIFICATIONS SITE NO. 439001

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Tohn J Ruspantini at M	ysta 18 Link dr Binghamfon, My print business address
am certifying as	(Owner or Remedial Party)
for the Site named in the Site Details Section of	of this form. $ \left(-10 - 18 \right) $
Signature of Owner, Remedial Party, or Design Rendering Certification	nated Representative Date

IC/EC CERTIFICATIONS

QUALIFIED ENVIRONMENTAL PROFESSIONA

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

John J Rushantingi_print name	NYSET 18 Link (1) print business address	Bing ham
am certifying as a Professional Engineer for t	(Owner or Rem	edial Party)
Signature of Professional Engineer, for the O	CHMM No. 10302 Owner or Stamp (Required for PE)	1-10-19 Date



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Fairport, New York 14450

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Fax 585 385 4198

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