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One Holland Avenue Development, LLC

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PERIODIC REVIEW REPORT (REPORTING PERIOD MARCH 23, 2019 TO MARCH 23, 2020)

**PERIODIC REVIEW REPORT (REPORTING PERIOD MARCH
23, 2019 TO MARCH 23, 2020)
BROWNFIELD CLEANUP PROGRAM NO. C360115**

Project name **Periodic Review Report**
Project no. **14206/72276**
Recipient **One Holland Avenue Development, LLC**

Ramboll
333 West Washington Street
Syracuse, NY 13202
USA

T 315-956-6100
F 315-463-7554
<https://ramboll.com>

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EXECUTIVE SUMMARY

Site Summary

The 1-5 Holland Avenue Site, located in White Plains, New York, is an approximately 0.72-acre property that is fully developed with a building and parking lots. Past commercial/industrial use of the Site resulted in contamination of groundwater, soil, and subsurface soil-vapor with tetrachloroethylene (PCE) and its degradation products. Observed concentrations of PCE in groundwater are highest near the suspected source area (former floor drains), and PCE was also found exceeding groundwater standards at the downgradient property boundary and in downgradient off-site wells. Concentrations of contaminants in soils were generally found to be within regulatory screening values (6 NYCRR Part 375-6 Commercial and Protection of Groundwater Soil Cleanup Objectives) with the exception of low levels of lead, mercury, copper, arsenic and semi-volatile organic compounds attributed to historic urban fill at the Site. The property was enrolled in the Brownfield Cleanup Program in December 2010 by the former owner One Holland Avenue Development LLC (OHAD). The remedial program was developed, approved by New York State Department of Environmental Conservation (NYSDEC), and implemented between March 2011 and December 2014. The NYSDEC issued a Certificate of Completion for the Site on December 23, 2014. The following NYSDEC approved changes to the Site Management Plan (SMP) have occurred since its approval in 2014:

- Potential vapor intrusion monitoring at 2 Holland Avenue was eliminated
- Groundwater sampling frequency was reduced from semi-annual to annual
- Upgradient off-site wells were decommissioned

The site changed ownership on September 17, 2019 from 1 Holland LLC to 1 Holland Ave Storage LLC. Supporting documentation, which includes the NYSDEC completed *60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion, and/or Ownership* and *Notice of Transfer of Certificate of Completion*, is included in **Attachment A**.

Remedial Program and Effectiveness

A Remedial Program was implemented that includes the following major elements: 1) two rounds of *in situ* chemical oxidation (ISCO) were used to treat groundwater in the suspected source area, 2) an engineering control (EC) comprising a sub-slab depressurization (SSD) system was installed to mitigate potential for vapor intrusion (VI) at the Site and the neighboring 7-11 Holland Avenue building, 3) an EC comprising a composite site cover system was employed at the Site to prevent exposure to residual soil contamination, 4) Institutional Controls (ICs) that were recorded in an environmental easement to limit Site use to commercial/industrial use and to prohibit groundwater use, and 5) an Operations, Maintenance and Monitoring Plan that outlines the activities to be performed to verify that remedy performance, effectiveness and protectiveness are maintained and evaluated under the requirements of the *Site Management Plan, BCP No. C360115, 1-5 Holland Avenue, White Plains, New York* (SMP) dated December 2014 (O'Brien & Gere Engineers, Inc. (OBG), 2014a). Off-site VI monitoring at 2 Holland Avenue has been removed from the SMP as directed by NYSDEC's Periodic Review Report (PRR) acceptance letter dated September 29, 2017. The SMP was revised to reflect this change and submitted to the NYSDEC in February 2018. In addition, in accordance with NYSDEC PRR acceptance letter dated October 17, 2018, upgradient wells MW-6 and MW-6SB were

decommissioned in December 2018 and groundwater sampling frequency was reduced from semi-annual to annual sampling.

The Remedial Program is proving effective at meeting remedial objectives for the Site. Groundwater monitoring for both on-site and off-site wells was successfully completed in April 2019. These data indicate:

- Upgradient Off-site wells – In accordance with NYSDEC PRR acceptance letter dated October 17, 2018, upgradient wells MW-6 and MW-6SB were decommissioned in December 2018.
- Source area wells – Compared to the prior two sampling events, the PCE concentration in MW-4D and -4S each showed reductions in concentrations; however, a significant trend in reduction has not developed at this time. The absence of a significant trend in concentrations increasing or decreasing over the last three sampling events suggest that PCE concentrations may have stabilized in these wells; however, additional data is necessary to assess if concentrations have reached asymptotic levels.
- On-site downgradient/sidegradient wells – The 2019 round of groundwater data indicates that groundwater from five out of the seven property boundary wells exceeded the New York State Class GA groundwater standard for PCE. Consistent with the 2018 data, no PCE degradation compounds were detected in these wells above the Class GA groundwater standards.
- Downgradient Off-site wells – Consistent with the prior eight groundwater sampling events, groundwater from two (MW-7 and MS-8SB) out of the six downgradient off-site wells exceeded the Class GA standard for PCE. As detailed in the Remedial Investigation (RI) Report (OBG, 2014b), it is believed that PCE detected in these wells is the result of a source other than 1-5 Holland Avenue.

Compliance

No areas of non-compliance regarding major elements of the SMP were identified. Periodic site inspections indicated the Site is being used and managed in compliance with the IC/EC Plan, the Monitoring Plan, and the Operations, Maintenance and Monitoring Plan. It was noted that during the most recent SSDS inspection that fan 2A was not functioning as a result of a failed wiring connection. This issue has been corrected and the fan is operating as designed.

Recommendations

At present no changes to the SMP are recommended.

In accordance with the SMP, the following is the Periodic Review Report for the Reporting Period of March 23, 2019 to March 23, 2020.

1. BACKGROUND AND SITE DESCRIPTION

One Holland Avenue Development, LLC (OHAD), located in White Plains, New York, entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in December 2010 (last amended in August 2014), to investigate and remediate a 0.72-acre site located at 1-5 Holland Avenue, White Plains, Westchester County, New York (**See Figure 1**). The Site is bounded by Holland Avenue to the north, White Plains Rural Cemetery to the south, commercial buildings at 7-11 Holland Avenue to the east, and Harlem Line of Metro North Railroad tracks and parking area to the west (**see Figure 2**). The property was remediated to commercial use and received a NYSDEC Brownfield Cleanup Program (BCP) Certificate of Completion on December 23, 2014.

The site changed ownership on September 17, 2019 from 1 Holland LLC to 1 Holland Ave Storage LLC. Supporting documentation, which includes the NYSDEC completed *60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion, and/or Ownership* and *Notice of Transfer of Certificate of Completion*, is included in **Attachment A**.

Based on historical reports and data collected during the Remedial Investigation (RI) and documented in the RI Report (OBG, 2014b), the source of tetrachloroethylene (PCE) is believed to be from historical metal degreasing operations at the Site and possible releases through cracks in floor drains, which discharged to the sanitary sewer. The primary constituents of concern (COCs) associated with historical operations include PCE and associated degradation products: trichloroethene (TCE), 1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC). Secondary COCs include semi-volatile organic compounds (SVOCs) and metals in shallow soils (less than 4 feet below grade). The source of the secondary COCs is believed to be associated with urban development (*e.g.*, historical backfill, asphalt constituents) and not Site related.

As documented in the RI Report (OBG, 2014b), the nature and extent of contamination prior to implementation of remedial measures was as follows:

- Soil: COCs detected in soils were generally less than the regulatory screening values (6 NYCRR Part 375-6 Commercial and Protection of Groundwater Soil Cleanup Objectives (SCOs)) with some isolated exceptions.
 - Metals in the surface and subsurface fill with concentrations exceeding the regulatory screening values were primarily limited to lead, mercury, copper and arsenic. These exceedances are considered to be related to the historic urban fill under the entire Site, and not related to historical Site activities.
 - SVOCs were observed in the surface soil samples in the front and rear of the building. SVOC exceedances of 6 NYCRR Part 375 Restricted Commercial and Protection of Groundwater SCOs were limited to surface soil samples collected from the rear of the building. These SVOCs may be a result of vehicle emissions, asphalt dust, sealcoat paving operations and other urban factors, and are not considered to be related to historical Site activities.
- Groundwater: Results of groundwater sampling indicated the presence of PCE in overburden and bedrock groundwater, on-Site and along the hydraulically downgradient western edge of the property, at concentrations above the New York State (NYS) Class GA groundwater

standard of 5 µg/l. The groundwater sampling event in June 2013, prior to the first of two groundwater *in situ* chemical oxidation (ISCO) treatment events, indicated the highest concentrations of PCE in suspected source area (near historic floor drains FD-2 and FD-3) wells MW-4S (overburden) and MW-4D (shallow bedrock) at 1,040 µg/l and 5,500 µg/l, respectively.

The principal transport pathway of PCE is as a dissolved constituent in the overburden groundwater. Overburden groundwater flow, and PCE transport, is to the west/northwest toward the Bronx River. Groundwater transport of PCE, toward the Bronx River, also occurs in the upper bedrock zone.

2. SUMMARY OF SITE REMEDY

A summary of remedial measures and objectives is as follows:

Remedial Measures

As documented in the *Final Engineering Report* (OBG, 2014c), remedial measures for the Site are described below and detailed on **Figure 3**.

- **Surface Soil Excavation and Cover System Placement:** Surface soil excavation was conducted at the Site to remove exposed surface soil exhibiting concentrations greater than 6 NYCRR Part 375 SCOs for Commercial Use. These excavated areas were backfilled with 12 inches of clean soil or granular stone, asphalt pavement, or concrete. Excavation activities were conducted in July and September 2013 and February 2014.
- **In Situ Chemical Oxidation Groundwater Treatment:** Groundwater treatment was implemented to address chlorinated VOCs in groundwater detected at concentrations greater than the NYS Class GA groundwater standards. The groundwater treatment remedial measure consisted of ISCO using an activated sodium persulfate process to treat PCE in subsurface soil, bedrock, and groundwater. Ten injection well (IW) clusters (three injection points discharging at different depths per cluster) were installed in the suspected source area in 2013. ISCO groundwater treatment events were conducted in June 2013 and September 2014.

As detailed in the SMP, four additional components were added to the site remedy:

- Institutional Controls (ICs) in the form of an Environmental Easement
- Engineering Controls (ECs) including a Site Cover System and on-going operation of a SSD System to control the potential for VI
- Monitoring Plan to assess concentrations of COCs in groundwater, effectiveness of the SSD System to control VI, and integrity of the site cover system
- Operations, Maintenance, and Monitoring (OMM) Plan to maintain the existing SSD System.

Remedial Action Objectives

Based on the results of the RI, the following Remedial Action Objectives (RAOs) were identified for this Site and were included in the Decision Document dated November 2014 (NYSDEC, 2014).

- **Groundwater RAOs**

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable

- Prevent the discharge of contaminants from groundwater to surface water
- Remove the source of ground or surface water contamination.

- **Soil RAOs**

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent exposure to contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Soil Vapor RAOs.

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at and adjacent to the Site.

3. EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

The evaluation of remedy performance, effectiveness and protectiveness for groundwater, soil, and soil vapor is presented below.

- **Groundwater**

The ISCO groundwater treatment combined with natural attenuation processes have resulted in substantial reduction of PCE concentrations in groundwater.

The most recent groundwater sampling results from April 2019 indicate that PCE concentrations in:

- Upgradient Off-site wells – In accordance with NYSDEC PRR acceptance letter dated October 17, 2018, upgradient wells MW-6 and MW-6SB were decommissioned in December 2018.
- Source area wells – Compared to the prior two sampling events, the PCE concentration in MW-4D and -4S each showed reductions in concentrations; however, a significant trend in reduction has not developed at this time. The absence of a significant trend in concentrations increasing or decreasing over the last three sampling events suggest that PCE concentrations may have stabilized in these wells; however, additional data is necessary to assess if concentrations have reached asymptotic levels.
- Five out of the seven on-site hydraulically downgradient/sidegradient wells exceeded the Class GA groundwater standards; however, just MW-2DB, -5 and -5SB exceeded the standard by just 1, 2 and 2 ug/L, respectively.
- Two (MW-7 and -8SB) out of the six downgradient off-site wells exceeded the Class GA groundwater standards by one and two orders of magnitude, respectively. This is consistent with the prior six groundwater sampling events.

A summary of PCE concentrations from 2011 to 2019 is presented below.

	10/1/11	5/1/12	6/10/13	7/17/14	10/10/14	5/7/15	10/9/15	5/04/16	10/26/16	5/18/17	10/30/17	5/15/18	4/26/19
Source Area Wells													
MW-4D	6070	6140	5500	2000	54	29	2490	1300	990	300	221	300	116
MW-4S	1410	1020	1040	890	327	460	730	400	107	158	151	180	24
On-site Wells													
MW-1	58	17	2	16	3	10	3	1	2	29	2	34	56
MW-2	72	189	27	94	158	33	64	55	15	44	83	123	40
MW-2DB	5	4	3	3	4	3	3	3	2	2	4	4	6
MW-2SB	0.67	0.1	0.78	0.52	0.48	0.34	0.24	0.36	0.22	0.2	0.37	0.43	0.53
MW-5	9	3	165	5	4	4	2	2	32	42	7	4	7
MW-5DB	2	4	1	0.41	0.48	0.55	0.39	0.31	0.25	3	0.34	0.28	0.51
MW-5SB	6	24	4	3	2	2	2	1	2	0.43	2	4	7
Off-site Wells													
MW-7	26.2	9.53	14	57	71	47	32	34	15	32	31	68	54
MW-7SB	24.7	16	6	7	3	1	0.97	1	0.59	0.27	0.2	0.32	0.27
MW-8	21.3	26.3	1	4	1	2	1	1	1	3	2	1	2
MW-8SB	250	217	265	292	3	280	359	240	190	229	271	360	177
MW-9	0.47	0.33	0.18	0.2	0.38	0.1	0.25	0.25	0.31	0.2	0.31	<1	<1
MW-9SB	1.23	1.09	0.3	0.34	0.26	0.21	0.21	0.25	0.2	0.2	0.2	0.28	0.49
Note: Bolded values indicate exceedance to NYS Class GA standard. Green highlights indicate values below NYS Class GA standard.													

• Soil

As detailed in the Monitoring Compliance Report (Section 5), site wide inspection of the cover system presented in the SMP continues to document that the cover system is intact and, therefore, effective at protecting the public, on-site workers, and potential utility workers from exposures of COCs.

- **Soil Vapor**

On-site/7-11 Holland Avenue: The Site remedy to address the potential for VI includes a SSD System and OMM Plan. Based on the January 21 and April 30, 2020 inspections of the SSD System, the remedy is performing as designed and is protective of on-site workers and patrons that may enter the buildings. The negative pressure under 7-11 Holland Avenue was not assessed based on it being unoccupied. Should tenants occupy the building in the future Ramboll will continue to assess sub-slab depressurization in this area.

4. INSTITUTIONAL CONTROL/ENGINEERING CONTROL PLAN COMPLIANCE REPORT

Due to the presence of residual concentrations of constituents in soil, groundwater, and soil vapor beneath the Site, Institutional Controls and Engineering Controls (IC/ECs) were established to protect human health and the environment. This PRR describes the IC/ECs in place, their objectives, and performance over the PRR time period.

- **Engineering Controls**

Two ECs have been implemented at the Site, which include a composite cover system and sub-slab depressurization system. A review of these ECs and their performance is presented below.

- Composite Cover System

The objective of the cover system is to prevent human exposure to remaining contamination in soil/fill at the Site. This cover system comprises a combination of 12 inches of clean soil or granular stone, asphalt pavement, concrete-covered sidewalks, and concrete building foundation slabs. This EC is coupled with an Excavation Work Plan that is required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and underlying remaining contaminated soil is disturbed.

The composite cover system was inspected on January 2, 2020 in accordance with Section 3.4 Site-Wide Inspection and Attachment H *Site-Wide Inspection Form* of the SMP. Results of this inspection indicated that the composite cover system was performing as expected. A completed SMP cover system inspection form is presented in **Attachment B**.

- VI Mitigation Sub-Slab Depressurization System

The SSD System was installed with the objective of maintaining acceptable indoor air concentrations at the 1-5 Holland Ave and 7-11 Holland Ave buildings by inducing a sub-slab vacuum. A visual inspection of the SSD System was conducted on January 21, 2020 in accordance with the OMM Plan presented in Appendix J of the SMP. This inspection was conducted to verify that the SSD System installed at 1-5 Holland Avenue was operating as designed and providing depressurization beneath the slab at 1-5 Holland Avenue and in the western portion of 7-11 Holland Avenue. Some components of the SSD System installed at 1-5 Holland Avenue are no longer accessible due to building modifications (five of the eleven system suction points are not accessible following installation of the storage units); however, the system fans are electronically monitored to indicate they are still in operation.

Results of the SSD inspection did not identify needed corrective actions to the SSD System with the exception of fan 2A. This fan had a failed electrical wiring connection, which was repaired on April 30, 2020 by Ramboll personnel. The completed SSD System inspection forms are presented in **Attachment B**. Additional information on the SSD Systems' performance and corrective actions taken are detailed in the OMM Plan Compliance Report presented in Section 6.

The SSD System will be operational until a request to terminate the system along with supporting environmental data is submitted to and approved by the NYSDEC and NYSDOH.

- **Institutional Controls**

ICs required by the BCP Decision Document (NYSDEC, 2014) include: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Commercial and Industrial uses only. Adherence to these ICs on the Site is required by the Environmental Easement (Westchester County, Control No. 542943402).

Institutional Controls currently in-place in the form of required activities identified in the Environmental Easement are as follows:

- Compliance with the Environmental Easement and SMP
- Operation and maintenance of ECs
- Implementing an inspection program for ECs
- Monitoring of groundwater
- Reporting data and information collected as part of the SMP at the required frequency.

Institutional Controls currently in-place in the form of Site restrictions identified in the Environmental Easement are as follows:

- The property may only be used for restricted commercial and industrial use
- The property may not be used for a higher level of use, such as unrestricted, residential or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use
- The potential for vapor intrusion must be evaluated for any new structure on the property, or any horizontal expansion of an existing structure on the property, and any potential impacts that are identified must be monitored or mitigated
- Vegetable gardens and farming on the property are prohibited

The completed and signed New York State Professional Engineer signed IC/EC Certification Form is presented in **Attachment A**.

5. MONITORING PLAN COMPLIANCE REPORT

- **Components of Monitoring Plan**

The Monitoring Plan for the Site consists of the following two components:

- Groundwater monitoring for VOCs is conducted annually and includes fifteen groundwater monitoring wells. Monitoring is conducted to assess the performance of the ISCO injection events conducted in 2013/2014 and natural attenuation of COCs. As requested in the PRR for reporting year March 23, 2017 – March 23, 2018 and subsequent approval by NYSDEC upgradient wells (MW-6 and MW-6D) were decommissioned in December 2018 and groundwater sampling frequency was changed from semi-annual to annual. The SMP was updated to reflect these changes and copies were provided to the NYSDEC-Headquarters, White Plains Public Library and NYSDEC Region 3 office in accordance with Citizen Participation Plan (OBG, 2011) requirements.
- Site-Wide Inspections are to be conducted once per year at the level of detail necessary to assess compliance with ICs, condition and effectiveness of ECs, including sub-slab depressurization at 7-11 Holland Avenue.

- **Summary of PRR Monitoring Activities**

Monitoring conducted during this PRR period was as follows:

- Groundwater sampling was conducted on April 26, 2019. A groundwater monitoring report for this event, which incorporates field and laboratory data, tables, figures and conclusions are presented in **Attachment C**. The groundwater monitoring program was compliant with requirements with the SMP.
- Groundwater flow monitoring
Groundwater elevation measurements were collected from overburden, shallow bedrock, and deep bedrock monitoring wells, which were used to develop overburden and shallow bedrock groundwater elevation contour maps presented as **Figures 4** and **5**, respectively. A deep bedrock groundwater elevation contour map was not developed, because only two deep bedrock wells exist.
 - Overburden – Groundwater level measurements in the overburden indicate a hydraulic gradient from east to west consistent with prior measurements collected during the Remedial Investigation, site topography, and the presence of the Bronx River to the west of the Site.
 - Shallow Bedrock – Groundwater level measurements in the shallow bedrock wells also indicate a hydraulic gradient east to west. This hydraulic gradient is consistent with that observed in the overburden, the overall topography, and the presence of a regional topographic low in the vicinity of the Bronx River.
- Site wide cover system and monitoring well inspections were completed on January 2 and 3, 2020, respectively. Completed inspection forms are presented in **Attachment B**.

- **Comparisons with Remedial Objectives**

A summary table of historical PCE concentrations in groundwater is presented in **Table 1**. Groundwater analytical results exceeding NYS Class GA groundwater standards for the April 26, 2019 sampling event are presented on **Figure 6**.

A comparison of the pre-ISCO June 10, 2013 and April 26, 2019 groundwater sampling data indicates:

- Upgradient Off-site wells – In accordance with NYSDEC PRR acceptance letter dated October 17, 2018, upgradient wells MW-6 and MW-6SB were decommissioned in December 2018.
- Source area wells – Compared to the prior sampling event, the PCE concentration in MW-4D is within the same order of magnitude and have decreased from 2,490 µg/L to 116 µg/L since 2015. Compared to the prior sampling event, concentrations of PCE in well MW-4S have decreased an order of magnitude from 180 µg/L to 24 µg/L. PCE degradation compounds were not detected in source area wells.
- On-site downgradient wells – The 2019 round of groundwater data indicates that groundwater from five out of the seven property boundary wells exceeded the New York State Class GA groundwater standard for PCE; however, it is noted that three of these wells had exceedances of only 1-2 µg/L. Consistent with the 2018 data, no PCE degradation compounds were detected in these wells above the Class GA groundwater standards.
- Downgradient Off-site wells – Of these three well clusters (overburden/shallow bedrock) one overburden (MW-7) and one shallow bedrock (MW-8SB) well exhibited concentrations of PCE above the GA standard within the same order of magnitude of prior sampling events since 2015. Remaining wells did not exhibit detectable concentrations of PCE or values were below the GA standard.

6. OPERATIONS, MAINTENANCE AND MONITORING PLAN COMPLIANCE REPORT

Operations, maintenance and monitoring activities for the Site pertain to the operation of the SSD System. Annual inspections are conducted to assess System performance and to conduct a visual inspection of the structure and the System's installation, both indoors and outdoors. The latest SSD System annual inspection report, which includes a completed copy of the systems inspection forms, detailed in the SMP, is presented in **Attachment B**. In general, the inspection included:

- Structure – Checking for changes in the structure that could affect the system's performance.
- Fan and Electrical – Recording suction point vacuums and comparison with the prior commissioned vacuums as well as inspections of electrical connections.
- Piping, Slab and Wall – Inspecting piping supports, connections, and exhaust stack; checking for visible new cracks in walls and floors.

The most recent inspection was conducted on January 21, 2020 to assess that the SSD System installed at 1-5 Holland Avenue was operating as designed and was providing depressurization beneath the slab at 1-5. Some components of the SSD System installed at 1-5 Holland Avenue are no longer accessible due to building modifications (five of the eleven system suction points are not accessible following installation of the storage units). Visual inspection of accessible SSD System components similarly indicated that the SSD System components are operating as designed with the exception of fan 2A. This fan was not operating as a result of a failed wire connection. On April 30, 2020 Ramboll technicians re-connected the wiring to the fan, which is now operating as designed. Results of the SSD assessment did not identify additional needed corrective actions to the SSD System. Depressurization under the neighboring 7-11 Holland Avenue site was not conducted based the building being unoccupied.

7. PERIODIC REVIEW REPORT CONCLUSIONS AND RECOMMENDATIONS

As documented in this PRR the Site is being managed in compliance with the SMP.

- **Groundwater Monitoring**

Compared to the prior two sampling events, the PCE concentration in MW-4D and -4S each showed reductions in concentrations; however, a significant trend in reduction has not developed at this time. The absence of a significant trend in concentrations increasing or decreasing over the last three sampling events suggest that PCE concentrations may have stabilized in these wells; however, additional data is necessary to assess if concentrations have reached asymptotic levels.

- **SSD System**

Based on the SSD system inspections conducted on January 21, 2020 and follow-up maintenance activities on April 30, 2020, the SSD system continues to operate as designed.

- **Composite Cover System**

Based on Ramboll's site inspection on January 2, 2020, the cover system does not have any breaches and is effective at protecting the public and on-site workers from exposures of COCs.

8. REFERENCES

OBG, 2011. *Remedial Investigation Work Plan, 1 – 5 Holland Avenue Site, White Plains, New York*, March 2011 (Appendix D)

OBG, 2014a. *Site Management Plan, 1-5 Holland Avenue, Brownfield Cleanup Program, Site No. C360115, White Plains, New York*. December 2014 (Updated February 2018).

OBG, 2014b. *Remedial Investigation Report, BCP No. C360115, 1-5 Holland Avenue, White Plains, New York*. April 2014.

OBG, 2014c. *Final Engineering Report, 1-5 Holland Avenue, Brownfield Cleanup Program, Site No. C360115, White Plains, New York*. December 2014.

OBG, 2017. *Periodic Review Report, Brownfield Cleanup Program No. C360115, White Plains, New York*, April 2017.

NYSDEC, 2014. *Decision Document, 1-5 Holland Avenue, Brownfield Cleanup Program, White Plains, Westchester County, Site No. C360115*, November 2014.

TABLES

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-2
		Screen Interval (ft above msl):	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	181.4 - 191.4
		Date Sampled:	10/19/2011	5/1/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/21/2011
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards	On-Site Locations															On-Site Locations
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
1,1,2,2-Tetrachloroethane	ug/L	5	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.310
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440
1,1,2-Trichloroethane	ug/L	1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
1,1-Dichloroethane	ug/L	5	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430
1,1-Dichloroethene	ug/L	5	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.710
1,2,3-Trichlorobenzene	ug/L	5	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
1,2,4-Trichlorobenzene	ug/L	5	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855
1,2-Dichlorobenzene	ug/L	3	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
1,2-Dichloropropane	ug/L	1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520
1,3-Dichlorobenzene	ug/L	3	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
1,4-Dichlorobenzene	ug/L	3	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330
1,4-Dioxane	ug/L	NC	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	<22.5 R
2-Butanone (MEK)	ug/L	50	<0.630	<0.550	3.4 J	<10	0.79 J	0.63 J	<10	<10	<10	0.43 J	8.3 J	<10	<10	1.30 J	<10	<0.630
2-Hexanone	ug/L	50	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.260
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.510	<0.350	<0.35	<10	<10	<10	0.37 J	<10	<10	<10	<10	<10	<10	<10	<10	<0.510
Acetone	ug/L	50	<0.870	<0.280	<4.0	1.38 J	4.24 J	2.67 J	<10	1.27 J	<10	2.89 J	18	<10	2.44 J	4.60 J	2.94 J	<0.870
Benzene	ug/L	1	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430
Bromochloromethane	ug/L	5	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.470
Bromodichloromethane	ug/L	50	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
Bromoform	ug/L	50	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.260
Bromomethane	ug/L	5	<0.510	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.670
Carbon disulfide	ug/L	NC	<0.670	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.27 J	<1	<0.500
Carbon tetrachloride	ug/L	5	<0.500	<0.360	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400
Chlorobenzene	ug/L	5	<0.400	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480
Chloroethane	ug/L	5	<0.480	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.780
Chloroform	ug/L	7	<0.340	<0.220	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.20 J	<1	<0.340
Chloromethane	ug/L	5	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
cis-1,2-Dichloroethene	ug/L	5	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380
cis-1,3-Dichloropropene	ug/L	0.4	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
Cyclohexane	ug/L	NC	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460
Dibromochloromethane	ug/L	50	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
Dichlorodifluoromethane	ug/L	5	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
Ethylbenzene	ug/L	5	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340
Isopropylbenzene	ug/L	5	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390
Methyl acetate	ug/L	NC	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380
Methylcyclohexane	ug/L	NC	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	0.29 J	<1	<1	<1	<0.460
Methylene chloride	ug/L	5	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.52 J	<1.98
Styrene	ug/L	5	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330
Tetrachloroethene	ug/L	5	57.9	17.1	2	0.39 J	3	16	3	10	3	1	2	29	2	34	56	71.7
Toluene	ug/L	5	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390
trans-1,2-Dichloroethene	ug/L	5	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550
trans-1,3-Dichloropropene	ug/L	0.4	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320
Trichloroethene	ug/L	5	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550
Trichlorofluoromethane	ug/L	5	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.660
Vinyl Chloride	ug/L	2	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460
Xylenes (Total)	ug/L	5	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.630
Total VOCs	ug/L	NA	57.9	17.1	5.4 J	1.77 J	7.24 J	19.3 J	0.37 J	11.27 J	3	4.32 J	26.3	29.3 J	4.44 J	40.37 J	59.46 J	71.7

Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Series:
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2DB	MW-2DB	
		Screen Interval (ft above msl):	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	126.3 - 136.3	126.3 - 136.3	
		Date Sampled:	5/2/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011	10/20/2011	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards															On-Site Locations		
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	
1,1,2,2-Tetrachloroethane	ug/L	5	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	
1,1,2-Trichloroethane	ug/L	1	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	
1,1-Dichloroethane	ug/L	5	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	
1,1-Dichloroethene	ug/L	5	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	
1,2,3-Trichlorobenzene	ug/L	5	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	
1,2,4-Trichlorobenzene	ug/L	5	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	
1,2-Dichlorobenzene	ug/L	3	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	
1,2-Dichloropropane	ug/L	1	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	
1,3-Dichlorobenzene	ug/L	3	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	
1,4-Dichlorobenzene	ug/L	3	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	
1,4-Dioxane	ug/L	NC	<0.301	<0.97	<5	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	<1	<20.2 R	<22.5 R	
2-Butanone (MEK)	ug/L	50	<0.550	4.7 J	<10	0.69 J	0.56 J	<10	<10	<10	0.34 J	13	<10	<10	1.28 J	<10	<0.510	<0.630	
2-Hexanone	ug/L	50	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.350	<0.35	<10	<10	<10	<10	<10	<10	<10	0.15 J	<10	<10	0.16 J	<10	<0.410	<0.510	
Acetone	ug/L	50	<0.280	<4.0	0.96 J	1.92 J	3.36 J	<10	1.39 J	<10	2.04 J	11	<10	<10	2.11 J	4.67 J	2.94 J	<0.610	<0.870
Benzene	ug/L	1	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	
Bromochloromethane	ug/L	5	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	
Bromodichloromethane	ug/L	50	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.350	
Bromoform	ug/L	50	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	
Bromomethane	ug/L	5	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	
Carbon disulfide	ug/L	NC	<0.300	<0.13	<1	<1	<1	0.18 J	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	
Carbon tetrachloride	ug/L	5	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	
Chlorobenzene	ug/L	5	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	
Chloroethane	ug/L	5	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.780	
Chloroform	ug/L	7	<0.220	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.32 J	<1	2.41	<0.340	
Chloromethane	ug/L	5	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.350	
cis-1,2-Dichloroethene	ug/L	5	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	<0.560	<0.380	
cis-1,3-Dichloropropene	ug/L	0.4	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	
Cyclohexane	ug/L	NC	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	
Dibromochloromethane	ug/L	50	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	
Dichlorodifluoromethane	ug/L	5	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	
Ethylbenzene	ug/L	5	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	
Isopropylbenzene	ug/L	5	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	
Methyl acetate	ug/L	NC	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	
Methylcyclohexane	ug/L	NC	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.460	
Methylene chloride	ug/L	5	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.48 J	<1.98	<1.98	
Styrene	ug/L	5	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	
Tetrachloroethene	ug/L	5	189 D	27	6	19	94	158	33	64	55	15	44	83	123	40	4.83	4.96	
Toluene	ug/L	5	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.19	<0.390	
trans-1,2-Dichloroethene	ug/L	5	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	
trans-1,3-Dichloropropene	ug/L	0.4	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	
Trichloroethene	ug/L	5	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	<0.440	<0.550	
Trichlorofluoromethane	ug/L	5	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	
Vinyl Chloride	ug/L	2	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.460	
Xylenes (Total)	ug/L	5	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	
Total VOCs	ug/L	NA	189 D	31.7 J	6.96 J	21.61 J	97.92 J	158.18 J	34.39 J	64	57.38 J	39.45	44.0	85.11 J	129.43 J	43.42 J	8.43	4.96	

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2SB	MW-2SB	
		Screen Interval (ft above msl):	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	148.9 - 158.9	148.9 - 158.9
		Date Sampled:	5/2/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011	10/21/2011	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards														On-Site Locations			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	
1,1,2,2-Tetrachloroethane	ug/L	5	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	
1,1,2-Trichloroethane	ug/L	1	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	
1,1-Dichloroethane	ug/L	5	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	
1,1-Dichloroethene	ug/L	5	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	
1,2,3-Trichlorobenzene	ug/L	5	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	
1,2,4-Trichlorobenzene	ug/L	5	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	
1,2-Dichlorobenzene	ug/L	3	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	
1,2-Dichloropropane	ug/L	1	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	
1,3-Dichlorobenzene	ug/L	3	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	
1,4-Dichlorobenzene	ug/L	3	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	
1,4-Dioxane	ug/L	NC	<0.301	<0.97	<5	<5	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	<20.2 R	<22.5 R	
2-Butanone (MEK)	ug/L	50	<0.550	3.4 J	<10	1.15 J	0.54 J	<10	<10	<10	<10	12	<10	<10	1.80 J	<10	<0.510	<0.630	
2-Hexanone	ug/L	50	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.350	<0.35	<10	<10	<10	<10	<10	<10	0.15 J	<10	<10	<10	0.29 J	<10	<0.410	<0.510	
Acetone	ug/L	50	<0.280	<4.0	1.23 J	5.22 J	2.07 J	<10	1.30 J	<10	<10	13	<10	<10	2.21 J	2.49 J	3.30 J	<0.610	<0.870
Benzene	ug/L	1	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.510	<0.430	
Bromochloromethane	ug/L	5	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	
Bromodichloromethane	ug/L	50	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.350	
Bromoform	ug/L	50	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	
Bromomethane	ug/L	5	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	
Carbon disulfide	ug/L	NC	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	
Carbon tetrachloride	ug/L	5	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	
Chlorobenzene	ug/L	5	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	
Chloroethane	ug/L	5	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.780	
Chloroform	ug/L	7	<0.220	0.26 J	<1	<1	0.30 J	0.19 J	<1	0.24 J	<1	0.16 J	<1	<1	<1	<1	13	2.69	
Chloromethane	ug/L	5	<0.280	<0.20	<1	<1	<1	0.24 J	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.350	
cis-1,2-Dichloroethene	ug/L	5	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.380	
cis-1,3-Dichloropropene	ug/L	0.4	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	
Cyclohexane	ug/L	NC	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	
Dibromochloromethane	ug/L	50	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	
Dichlorodifluoromethane	ug/L	5	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	
Ethylbenzene	ug/L	5	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	
Isopropylbenzene	ug/L	5	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	
Methyl acetate	ug/L	NC	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.240	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	
Methylcyclohexane	ug/L	NC	<0.360	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	0.22 J	<1	<1	<1	<0.290	<0.460	
Methylene chloride	ug/L	5	<1.98	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.45 J	<1.98	<1.98	
Styrene	ug/L	5	<0.250	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	
Tetrachloroethene	ug/L	5	4.41	3	0.42 J	3	4	4	3	3	3	2	2	4	4	6	0.988 J	0.670 J	
Toluene	ug/L	5	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.390	
trans-1,2-Dichloroethene	ug/L	5	<0.350	<0.58	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	
trans-1,3-Dichloropropene	ug/L	0.4	<0.220	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	
Trichloroethene	ug/L	5	<0.270	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.550	
Trichlorofluoromethane	ug/L	5	<0.450	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	
Vinyl Chloride	ug/L	2	<0.290	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.460	
Xylenes (Total)	ug/L	5	<0.690	<0.24	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	
Total VOCs	ug/L	NA	4.41	6.66 J	1.65 J	9.37 J	6.91 J	4.43 J	4.3 J	3.24 J	3	27.31	2.22 J	6.21 J	8.58 J	9.75 J	13.988 J	3.36 J	

Notes:
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ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-2SB	(DUP) MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-4D
		Screen Interval (ft above msl):	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	158 - 168
		Date Sampled:	5/2/2012	5/2/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards													On-Site Locations			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<0.330	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.40
1,1,2,2-Tetrachloroethane	ug/L	5	<0.320	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.60
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.420	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.40
1,1,2-Trichloroethane	ug/L	1	<0.220	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.4
1,1-Dichloroethane	ug/L	5	<0.260	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.80
1,1-Dichloroethene	ug/L	5	<0.410	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.20
1,2,3-Trichlorobenzene	ug/L	5	<0.210	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.0
1,2,4-Trichlorobenzene	ug/L	5	<0.200	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.80
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<13.2
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.00
1,2-Dichlorobenzene	ug/L	3	<0.230	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.80
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.200	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.20
1,2-Dichloropropane	ug/L	1	<0.250	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.20
1,3-Dichlorobenzene	ug/L	3	<0.230	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.20
1,4-Dichlorobenzene	ug/L	3	<0.230	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.60
1,4-Dioxane	ug/L	NC	<0.301	<0.301	<0.97	<5	<5	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	<404
2-Butanone (MEK)	ug/L	50	<0.550	<0.550	4.7 J	<10	<0.52 J	0.64 J	<10	<10	<0.62 J	<10	<12	<10	<10	2.76 J	0.91 J	<10.2
2-Hexanone	ug/L	50	<0.370	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<7.40
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.350	<0.350	<0.35	<10	<10	<10	<10	<10	<10	<10	0.17 J	<10	<10	0.35 J	<10	<8.20
Acetone	ug/L	50	<0.280	<0.280	5.0 J	1.38 J	3.13 J	3.81 J	<10	2.26 J	<10	2.07 J	13	53 J	4.96 J	7.60 J	8.17 J	<12.2
Benzene	ug/L	1	<0.250	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.00
Bromochloromethane	ug/L	5	<0.300	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.2
Bromodichloromethane	ug/L	50	<0.260	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<7.00
Bromoform	ug/L	50	<0.460	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10.4
Bromomethane	ug/L	5	<0.250	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<13.6
Carbon disulfide	ug/L	NC	<0.300	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.60
Carbon tetrachloride	ug/L	5	<0.360	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.80
Chlorobenzene	ug/L	5	<0.220	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.40
Chloroethane	ug/L	5	<0.360	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.60
Chloroform	ug/L	7	2.5	2.49	1	0.96 J	0.84 J	0.60 J	0.63 J	0.55 J	0.36 J	0.36 J	0.32 J	0.25 J	0.32 J	0.23 J	<1	<8.20
Chloromethane	ug/L	5	<0.280	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	<8.60
cis-1,2-Dichloroethene	ug/L	5	<0.300	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.2
cis-1,3-Dichloropropene	ug/L	0.4	<0.250	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<7.20
Cyclohexane	ug/L	NC	<0.380	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4.60
Dibromochloromethane	ug/L	50	<0.240	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.60
Dichlorodifluoromethane	ug/L	5	<0.290	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.40
Ethylbenzene	ug/L	5	<0.220	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.80
Isopropylbenzene	ug/L	5	<0.210	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.00
Methyl acetate	ug/L	NC	<0.220	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<12.0
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.240	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.00
Methylcyclohexane	ug/L	NC	<0.360	<0.360	<0.13	<1	<1	<1	<1	<1	<1	0.24 J	<1	<1	<1	<1	<1	<5.80
Methylene chloride	ug/L	5	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.66 J	<39.6
Styrene	ug/L	5	<0.250	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<7.60
Tetrachloroethene	ug/L	5	<0.330	<0.330	0.78 J	0.71 J	1	0.52 J	0.48 J	0.34 J	0.24 J	0.36 J	0.22 J	<1	0.37 J	0.43 J	0.53 J	2570
Toluene	ug/L	5	<0.270	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	0.13 J	<1	<1	<1	<1	<4.60
trans-1,2-Dichloroethene	ug/L	5	<0.350	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10.0
trans-1,3-Dichloropropene	ug/L	0.4	<0.220	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.00
Trichloroethene	ug/L	5	<0.270	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.80
Trichlorofluoromethane	ug/L	5	<0.450	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4.40
Vinyl Chloride	ug/L	2	<0.290	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.00
Xylenes (Total)	ug/L	5	<0.690	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<13.2
Total VOCs	ug/L	NA	2.5	2.49	11.48 J	3.05 J	5.59 J	5.57 J	1.11 J	3.15 J	0.60 J	3.03 J	25.99	53.3 J	5.65 J	11.37 J	10.27 J	2,570

Notes:
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Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	
		Screen Interval (ft above msl):	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168
		Date Sampled:	10/19/2011	5/1/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards												On-Site Locations					
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<17.5	<16.5	<54	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1,2,2-Tetrachloroethane	ug/L	5	<15.5	<16.0	<53	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<22.0	<21.0	<93	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1,2-Trichloroethane	ug/L	1	<18.0	<11.0	<69	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1-Dichloroethane	ug/L	5	<21.5	<13.0	<29	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1-Dichloroethene	ug/L	5	<35.5	<20.5	<54	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2,3-Trichlorobenzene	ug/L	5	<21.0	<10.5	<49	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2,4-Trichlorobenzene	ug/L	5	<19.5	<10.0	<49	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.00855	<24	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dichlorobenzene	ug/L	3	<18.0	<11.5	<27	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dichloroethane (EDC)	ug/L	0.6	<21.0	<10.0	<34	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dichloropropane	ug/L	1	<26.0	<12.5	<36	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,3-Dichlorobenzene	ug/L	3	<21.0	<11.5	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,4-Dichlorobenzene	ug/L	3	<16.5	<11.5	<36	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,4-Dioxane	ug/L	NC	<1130 R	<0.301	<0.97	<5	<5	<5	<5	<5	<5	<5	<5	<3	<3	<1	<1	<3	
2-Butanone (MEK)	ug/L	50	<31.5	<27.5	<650	<10	0.78 J	<200	<200	<10	<10	<10	<10	20 J	2.9 J	<1000	<1000	<500	
2-Hexanone	ug/L	50	<13.0	<18.5	<37	<10	<10	<200	<200	<10	<10	<10	<10	<500	<100	<1000	<1000	<500	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<25.5	<17.5	<70	<10	<10	<200	<200	<10	<10	<10	<10	<500	<100	<1000	<1000	<500	
Acetone	ug/L	50	<43.5	<14.0	<800	5.06 J	4.61 J	12 J	<200	<10	<10	1.97 J	2.02 J	<500	<100	<1000	<1000	<500	
Benzene	ug/L	1	<21.5	<12.5	<22	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromochloromethane	ug/L	5	<23.5	<15.0	<72	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromodichloromethane	ug/L	50	<17.5	<13.0	<38	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromoform	ug/L	50	<13.0	<23.0	<70	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromomethane	ug/L	5	<33.5	<12.5	<37	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Carbon disulfide	ug/L	NC	<25.0	<15.0	<25	<1	<1	<20	<20	0.35 J	0.19 J	<1	0.28 J	<50	<10	<100	<100	<50	
Carbon tetrachloride	ug/L	5	<20.0	<18.0	<38	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chlorobenzene	ug/L	5	<24.0	<11.0	<31	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chloroethane	ug/L	5	<39.0	<18.0	<43	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chloroform	ug/L	7	<17.0	<11.0	<30	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chloromethane	ug/L	5	<17.5	<14.0	<39	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
cis-1,2-Dichloroethene	ug/L	5	<19.0	<15.0	<42	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
cis-1,3-Dichloropropene	ug/L	0.4	<18.0	<12.5	<33	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Cyclohexane	ug/L	NC	<23.0	<19.0	<65	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Dibromochloromethane	ug/L	50	<18.0	<12.0	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Dichlorodifluoromethane	ug/L	5	<21.0	<14.5	<110	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Ethylbenzene	ug/L	5	<17.0	<11.0	<20	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Isopropylbenzene	ug/L	5	<19.5	<10.5	<23	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methyl acetate	ug/L	NC	<17.5	<11.0	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<19.0	<12.0	<50	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methylcyclohexane	ug/L	NC	<23.0	<18.0	<26	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methylene chloride	ug/L	5	<99.0	<99.0	<32	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Styrene	ug/L	5	<16.5	<12.5.0	<25	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Tetrachloroethene	ug/L	5	6070	6140	5500	332	317	2000	1750	54	63	29	25	2490	840	1300	1300	990	
Toluene	ug/L	5	<19.5	<13.5	<33	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
trans-1,2-Dichloroethene	ug/L	5	<27.5	<17.5	<29	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
trans-1,3-Dichloropropene	ug/L	0.4	<16.0	<11.0	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Trichloroethene	ug/L	5	<27.5	<13.5	<58	0.28 J	0.30 J	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Trichlorofluoromethane	ug/L	5	<33.0	<22.5	<57	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Vinyl Chloride	ug/L	2	<23.0	<14.5	<48	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Xylenes (Total)	ug/L	5	<31.5	<34.5	<120	<3	<3	<60	<60	<3	<3	<3	<3	<200	<30	<300	<300	<200	
Total VOCs	ug/L	NA	6,070	6,140	5,500	337.34 J	322.69 J	2,012 J	1,750	54.35 J	63.19 J	30.97 J	27.30 J	2510 J	842.9 J	1,300	1,300	990	

Notes:
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above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	DUP (MW-4D)	MW-4D	(DUP) MW-4D	MW-4D	(DUP) MW-4D	MW-4D	(DUP) MW-4D	MW-4D	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	DUP (MW-4S)	MW-4S	MW-4S
		Screen Interval (ft above msl):	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5
		Date Sampled:	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/19/2011	5/1/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards												On-Site Locations				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.50	<3.30	<14	<1	<1	<1	<10	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.10	<3.20	<13	<1	<1	<1	<10	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.40	<4.20	<23	<1	<1	<1	<10	<1
1,1,2-Trichloroethane	ug/L	1	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.20	<17	<1	<1	<1	<10	<1
1,1-Dichloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.30	<2.60	7.3	<1	<1	<1	<10	<1
1,1-Dichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<7.10	<4.10	<13	<1	<1	<1	<10	<1
1,2,3-Trichlorobenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.10	<12	<1	<1	<1	<10	<1
1,2,4-Trichlorobenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.90	<2.00	<12	<1	<1	<1	<10	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<50	<50	<50	<5	<1	<10	<10	<1	<0.00855	<0.00855	<6.1	<1	<1	<1	<10	<1
1,2-Dichlorobenzene	ug/L	3	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.30	<6.7	<1	<1	<1	<10	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.00	<8.6	<1	<1	<1	<10	<1
1,2-Dichloropropane	ug/L	1	<50	<50	<50	<5	<1	<10	<10	<1	<5.20	<2.50	<9.1	<1	<1	<1	<10	<1
1,3-Dichlorobenzene	ug/L	3	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.30	<10	<1	<1	<1	<10	<1
1,4-Dichlorobenzene	ug/L	3	<50	<50	<50	<5	0.31 J	<10	<10	<1	<3.30	<2.30	<9.0	<1	<1	<1	<10	<1
1,4-Dioxane	ug/L	NC	<3	<3	<3	<1	<1	<1	<1	<1	<225 R	<0.301	<0.97	<5	<5	<5	<5	<5
2-Butanone (MEK)	ug/L	50	<500	<500	<500	1.5 J	<10	<100	<100	<10	<6.30	<5.50	<160	<10	0.71 J	1.00 J	<100	<10
2-Hexanone	ug/L	50	<500	<500	<500	<50	<10	<100	<100	<10	<2.60	<3.70	<9.4	<10	<10	<10	<100	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<500	<500	<500	<50	<10	<100	<100	<10	<5.10	<3.50	<18	<10	<10	<10	<100	<10
Acetone	ug/L	50	<500	<500	<500	4.4 J	3.81 J	28.3 J	30.2 J	3.35 J	<8.70	<2.80	<200	3.71 J	2.65 J	3.06 J	9.3 J	4.6 J
Benzene	ug/L	1	<50	<50	<50	<5	<1	<10	<10	<1	<4.30	<2.50	<5.6	<1	<1	<1	<10	<1
Bromochloromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.70	<3.00	<18	<1	<1	<1	<10	<1
Bromodichloromethane	ug/L	50	<50	<50	<50	<5	<1	<10	<10	<1	<3.50	<2.60	<9.6	<1	<1	<1	<10	<1
Bromoform	ug/L	50	<50	<50	<50	<5	<1	<10	<10	<1	<2.60	<4.60	<18	<1	<1	<1	<10	<1
Bromomethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.10	<2.50	<9.2	<1	<1	<1	<10	<1
Carbon disulfide	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<6.70	<3.00	<6.3	<1	<1	<1	<10	<1
Carbon tetrachloride	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.00	<3.60	<9.4	<1	<1	<1	<10	<1
Chlorobenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.00	<2.20	<7.8	<1	<1	<1	<10	<1
Chloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.80	<3.60	<11	<1	<1	<1	<10	<1
Chloroform	ug/L	7	<50	<50	<50	<5	<1	<10	<10	<1	<3.40	<2.20	<7.5	<1	<1	<1	<10	<1
Chloromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	0.40 J	<3.50	<2.80	<9.8	<1	<1	<1	<10	<1
cis-1,2-Dichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.80	<3.00	<11	<1	<1	<1	<10	<1
cis-1,3-Dichloropropene	ug/L	0.4	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.50	<8.4	<1	<1	<1	<10	<1
Cyclohexane	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<4.60	<3.80	<16	<1	<1	<1	<10	<1
Dibromochloromethane	ug/L	50	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.40	<10.0	<1	<1	<1	<10	<1
Dichlorodifluoromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.90	<29	<1	<1	<1	<10	<1
Ethylbenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.40	<2.20	<5.1	<1	<1	<1	<10	<1
Isopropylbenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.90	<2.10	<5.8	<1	<1	<1	<10	<1
Methyl acetate	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<3.50	<2.20	<10	<1	<1	<1	<10	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<3.80	<2.40	<12	<1	<1	<1	<10	<1
Methylcyclohexane	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<4.60	<3.60	<6.4	<1	<1	<1	<10	<1
Methylene chloride	ug/L	5	<50	<50	<50	<5	<1	<10	<10	0.56 J	<1.98	<19.8	<8.1	<1	<1	<1	<10	<1
Styrene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.30	<2.50	<6.4	<1	<1	<1	<10	<1
Tetrachloroethene	ug/L	5	860	300	260	221	189	270	300	116	1410	1020	1040	10	21	21	890	327
Toluene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	0.29 J	<3.90	<2.70	<8.3	<1	<1	<1	<10	<1
trans-1,2-Dichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.50	<3.50	<7.2	<1	<1	<1	<10	<1
trans-1,3-Dichloropropene	ug/L	0.4	<50	<50	<50	<5	<1	<10	<10	<1	<3.20	<2.20	<10	<1	<1	<1	<10	<1
Trichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.50	<2.70	<15	<1	<1	<1	<10	<1
Trichlorofluoromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<6.60	<4.50	<14	<1	<1	<1	<10	<1
Vinyl Chloride	ug/L	2	<50	<50	<50	<5	<1	<10	<10	<1	<4.60	<2.90	<12	<1	<1	<1	<10	<1
Xylenes (Total)	ug/L	5	<200	<200	<200	<20	<3	<30	<30	<3	<6.30	<6.90	<29	<3	<3	<3	<30	<3
Total VOCs	ug/L	NA	860	300	260	226.9 J	193.12 J	298.3 J	330.2 J	120.6 J	1,410	1,020	1047.3	13.71 J	24.36 J	25.06 J	899.3 J	331.6 J

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	
		Screen Interval (ft above msl):	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)		10/21/2011	5/2/2012	6/10/2013	11/15/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards											On-Site Locations						
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<20	<10	<10	<1	<1	<1	<10	<1	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<20	<10	<10	<1	<1	<1	<10	<1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<20	<10	<10	<1	<1	<1	<10	<1	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	<5	
2-Butanone (MEK)	ug/L	50	<200	3.0 J	<100	9.1 J	<10	<10	<100	<10	<0.630	<0.550	8.0 J	<10	0.42 J	0.84 J	<10	<10	
2-Hexanone	ug/L	50	<200	<100	<100	<10	<10	<10	<100	<10	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<200	<100	<100	0.12 J	<10	<10	<100	<10	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	
Acetone	ug/L	50	<200	<100	<100	11	<10	2.46 J	26.7 J	2.71 J	<0.870	<0.280	<4.0	1.25 J	1.99 J	6.02 J	<10	0.69 J	
Benzene	ug/L	1	<20	<10	<10	<1	<1	<1	<10	<1	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<20	<10	<10	<1	<1	<1	<10	<1	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	
Bromoform	ug/L	50	<20	<10	<10	<1	<1	<1	<10	<1	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	
Bromomethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	
Chloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	
Chloroform	ug/L	7	<20	<10	<10	<1	<1	<1	<10	<1	<0.340	<0.220	<0.15	<1	<1	<1	<1	<1	
Chloromethane	ug/L	5	<20	<10	<10	0.16 J	<1	<1	<10	<1	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	
Methylene chloride	ug/L	5	<20	<10	<10	<1	<1	<1	<10	0.48	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	
Styrene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	460	730	400	107	158	151	180	24	9.19	3.14	165	5	67	5	4	4	
Toluene	ug/L	5	<20	<10	<10	0.15 J	<1	<1	<10	<1	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<20	<10	<10	<1	<1	<1	<10	<1	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	
Trichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	<20	<10	<10	<1	<1	<1	<10	<1	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<60	<30	<30	<3	<3	<3	<30	<3	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	
Total VOCs	ug/L	NA	460	733 J	400	127.53	158	153.46 J	206.7 J	27.19 J	9.19	3.14	173 J	6.25 J	69.41 J	11.86 J	4	4.69 J	

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ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	DUP (MW-5DB)	MW-5DB	MW-5DB	MW-5DB
		Screen Interval (ft above msl):	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3
		Date Sampled:	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011	10/21/2011	5/2/2012	6/10/2013	11/15/2013 (Post ISCO)	11/15/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards																
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1
1,4-Dioxane	ug/L	NC	<3	<1	<3	<3	<1	<1	<1	<20.2	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	<5
2-Butanone (MEK)	ug/L	50	<10	0.39 J	ug/L 9.0 J	<10	<10	1.59 J	<10	<0.510	<0.630	<0.550	4.8 J	<10	<10	0.47 J	0.79 J	<10
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	0.14 J	<10	<10	0.26 J	<10	<0.410	<0.510	<0.350	<0.35	<10	<10	<10	<10	0.38 J
Acetone	ug/L	50	<10	2.40 J	ug/L 9.9 J	<10	2.39 J	4.88 J	3.25 J	<0.610	<0.870	<0.280	<4.0	<10	0.89 J	3.42 J	4.48 J	<10
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1
Chloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1
Chloroform	ug/L	7	<1	<1	ug/L 0.11 J	<1	<1	<1	<1	1.54	0.425 J	<0.220	0.26 J	0.27 J	0.26 J	0.29 J	0.23 J	0.25 J
Chloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.350	<0.280	<0.20	<1	<1	<1	0.44 J	0.52 J
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	<1	0.41 J	<1.98	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	5	2	2	32	42	7	4	7	2.53	2.37	4.08	1	0.81 J	0.75 J	0.95 J	0.41 J	0.48 J
Toluene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	0.504 J	<0.390	<0.270	<0.17	<1	<1	<1	0.30 J	0.25 J
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5	<1	<1	0.13 J	<1	<1	<1	<1	<0.440	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	2	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3
Total VOCs	ug/L	NA	2	4.79 J	51.28	42	9.39 J	10.73 J	10.66 J	4.57 J	2.80 J	4.08	6.06 J	1.08 J	1.9 J	5.13 J	6.65 J	1.88 J

Notes:
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Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	
		Screen Interval (ft above msl):	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	4/26/2019 (Post ISCO)	5/5/2011	10/25/2011	5/2/2012	6/10/2013	11/15/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards									On-Site Locations								
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	<0.330	<0.27	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	<0.320	<0.27	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	<0.420	<0.46	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	<0.220	<0.34	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	<0.260	<0.15	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	<0.410	<0.27	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	<0.210	<0.25	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	<0.200	<0.24	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	<0.230	<0.13	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	<0.200	<0.17	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	<0.250	<0.18	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	<0.230	<0.20	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	<0.230	<0.18	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<20.2	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	
2-Butanone (MEK)	ug/L	50	<10	<10	<10	10	<10	<10	1.55 J	<10	<0.510	<0.630	<0.550	<3.3	<10	0.70 J	0.64 J	<10	
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	<0.370	<0.19	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	0.15 J	<10	<10	0.26 J	<10	<0.410	<0.510	<0.350	<0.35	<10	<10	<10	<10	
Acetone	ug/L	50	1.63 J	<10	2.01 J	9.9 J	<10	2.23 J	5.41 J	4.05 J	10.2	<0.870	<0.280	<4.0	0.86 J	3.86 J	4.27 J	<10	
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	<0.250	<0.11	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	<0.300	<0.36	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.350	<0.260	<0.19	<1	<1	<1	<1	
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	<0.460	<0.35	<1	<1	<1	<1	
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	<0.250	<0.18	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	<0.300	<0.13	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	<0.360	<0.19	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	<0.220	<0.16	<1	<1	<1	<1	
Chloroethane	ug/L	5	<1	<1	<1	<1	0.85 J	<1	<1	<1	<0.480	<0.780	<0.360	<0.21	<1	<1	<1	<1	
Chloroform	ug/L	7	0.30 J	0.25 J	0.26 J	0.23 J	0.29 J	0.25 J	0.33 J	0.29 J	4.22	3.12	0.533 J	0.56 J	0.50 J	0.55 J	0.40 J	0.36 J	
Chloromethane	ug/L	5	0.46 J	<1	<1	0.29 J	0.37 J	<1	0.30 J	0.31 J	<0.430	<0.350	<0.280	<0.20	<1	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.380	<0.300	<0.21	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	<0.250	<0.17	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	<0.380	<0.32	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	<0.240	<0.20	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	<0.290	<0.57	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	<0.220	<0.10	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	<0.210	<0.12	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	<0.220	<0.20	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	0.24 J	<1	<1	<1	<1	<1	<0.450	<0.380	<0.240	<0.25	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	0.25 J	<1	<1	<1	<0.290	<0.460	<0.360	<0.13	<1	<1	<1	<1	
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	0.62 J	<1.98	<1.98	<1.98	<0.16	<1	<1	<1	<1	
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	<0.250	<0.13	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	0.55 J	0.39 J	0.31 J	0.25 J	3	0.34 J	0.28 J	0.51 J	37.6	5.67	24.1	4	3	3	3	2	
Toluene	ug/L	5	<1	<1	<1	0.16 J	<1	<1	<1	<1	<0.230	<0.390	<0.270	<0.17	<1	<1	<1	0.33 J	
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<3	<1	<1	<1	<1	<1	<0.500	<0.550	<0.350	<0.14	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	<0.220	<0.20	<1	<1	<1	<1	
Trichloroethene	ug/L	5	<1	<1	<1	<1	1	<1	<1	<1	<0.440	<0.550	<0.270	<0.29	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	<0.450	<0.28	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	0.49 J	0.45 J	<1	0.28 J	0.82 J	0.46 J	0.50 J	0.59 J	<0.300	<0.460	<0.290	<0.24	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<3	<3	0.47 J	<3	<3	<3	<3	<3	<0.660	<0.630	<0.690	<0.58	<3	<3	<3	<3	
Total VOCs	ug/L	NA	3.43	1.09 J	3.29 J	21.26	4.76 J	3.28 J	8.63 J	6.37 J	52.02	8.79	24.6 J	4.56 J	4.36 J	8.11	8.31	2.69 J	

Notes:
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Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
		Screen Interval (ft above msl):	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	8/3/2011	10/18/2011	4/30/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards								On-Site Locations	Off-Site Upgradient Locations						
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	<0.330	<0.27	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	<0.320	<0.27	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	<0.420	<0.46	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	<0.220	<0.34	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	<0.260	<0.15	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	<0.410	<0.27	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	<0.210	<0.25	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	<0.200	<0.24	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	<0.00855	<0.12	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	<0.230	<0.13	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	<0.200	<0.17	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	<0.250	<0.18	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	<0.230	<0.20	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	<0.230	<0.18	<1	<1	<1
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<20.2	<22.5 R	<0.301	<0.97	<5	<5	<3
2-Butanone (MEK)	ug/L	50	<10	<10	<10	13	<10	<10	1.67 J	<10	2.33	<0.630	<0.550	6.2 J	0.83 J	<10	<10
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	<0.370	<0.19	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	0.19 J	<10	<10	0.25 J	<10	<0.410	<0.510	<0.350	<0.35	<10	<10	<10
Acetone	ug/L	50	1.45 J	<10	1.23 J	21	<10	2.49 J	4.97 J	2.91 J	17.7	<0.870	<0.280	<4.0	4.96 J	<10	1.31 J
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	<0.250	<0.11	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	<0.300	<0.36	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.550	<0.260	<0.19	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	<0.460	<0.35	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	<0.250	<0.18	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	<0.300	<0.13	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	<0.360	<0.19	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	<0.220	<0.16	<1	<1	<1
Chloroethane	ug/L	5	0.35 J	<1	0.43 J	0.41 J	<1	<1	<1	<1	<0.480	<0.780	<0.360	<0.21	<1	<1	<1
Chloroform	ug/L	7	0.38 J	0.32 J	0.26 J	0.24 J	0.31 J	<1	0.21 J	<1	11.1	<0.340	<0.220	<0.15	<1	<1	<1
Chloromethane	ug/L	5	<1	<1	<1	0.15 J	0.47 J	<1	<1	<1	<0.430	<0.350	<0.280	<0.20	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	0.11 J	<1	<1	0.26 J	0.27 J	<0.560	<0.380	<0.300	<0.21	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	<0.250	<0.17	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	<0.380	<0.32	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	<0.240	<0.20	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	<0.290	<0.57	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	<0.220	<0.10	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	<0.210	<0.12	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	<0.220	<0.20	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	<0.240	<0.25	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	0.22 J	0.20 J	<1	<1	<1	<1	<0.290	<0.460	<0.360	<0.13	<1	<1	<1
Methylene chloride	ug/L	5	0.30 J	<1	<1	<1	<1	<1	<1	0.47 J	<1.98	<1.98	<1.98	<0.16	<1	<1	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	<0.250	<0.13	<1	<1	<1
Tetrachloroethene	ug/L	5	2	2	1	2	0.43 J	2	4	7	<0.380	<0.470	<0.330	0.15 J	<1	<1	<1
Toluene	ug/L	5	0.26 J	<1	<1	0.26 J	<1	<1	<1	<1	<0.230	<0.350	<0.270	<0.17	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	<0.350	<0.14	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	<0.220	<0.20	<1	<1	<1
Trichloroethene	ug/L	5	<1	<1	0.35 J	0.70 J	<1	1	2	2	<0.440	<0.350	<0.270	<0.29	<1	<1	<1
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	<0.450	<0.28	<1	<1	<1
Vinyl Chloride	ug/L	2	0.39 J	0.44 J	0.45 J	0.36 J	0.89 J	0.38 J	0.37 J	0.32 J	<0.300	<0.460	<0.290	<0.24	<1	<1	<1
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	<0.690	<0.58	<3	<3	<3
Total VOCs	ug/L	NA	5.13 J	2.76 J	3.94 J		1.21 J	5.87 J	13.73 J	12.97 J	31.1	---	---	6.35 J	5.79 J	---	1.31 J

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-6	MW-6	MW-6	MW-6	MW-6
		Screen Interval (ft above msl):	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6
		Date Sampled:	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards					
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units						
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.02	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1
1,4-Dioxane	ug/L	NC	<1	<3	<3	<1	<1
2-Butanone (MEK)	ug/L	50	<10	<10	<10	<10	1.37 J
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	<10	0.22 J
Acetone	ug/L	50	0.99 J	45	<10	2.24 J	5.35 J
Benzene	ug/L	1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1
Chloroethane	ug/L	5	<1	<1	<1	<1	<1
Chloroform	ug/L	7	<1	<1	<1	<1	<1
Chloromethane	ug/L	5	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	5	<1	<1	<1	<1	<1
Toluene	ug/L	5	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	2	<1	<1	<1	<1	<1
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3
Total VOCs	ug/L	NA	0.99 J	45	---	2.24 J	6.94 J

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
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BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-65B ¹	MW-65B	DUP (MW-65B)	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-7	MW-7	
		Screen Interval (ft above msl):	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	174.7 - 184.7	174.7 - 184.7
		Date Sampled:	8/3/2011	10/18/2011	10/18/2011	4/30/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	5/4/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	10/18/2011	5/1/2012	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards	Off-Site Upgradient Locations														Off-Site Downgradient Locations	Off-Site Downgradient Locations	
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<0.420	<0.350	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.330	
1,1,2,2-Tetrachloroethane	ug/L	5	<0.280	<0.310	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.310	<0.320	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.320	<0.440	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.420	
1,1,2-Trichloroethane	ug/L	1	<0.570	<0.360	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.220	
1,1-Dichloroethane	ug/L	5	<0.440	<0.430	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.260	
1,1-Dichloroethene	ug/L	5	<0.410	<0.710	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.710	<0.410	
1,2,3-Trichlorobenzene	ug/L	5	<0.550	<0.420	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.210	
1,2,4-Trichlorobenzene	ug/L	5	<0.340	<0.390	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.200	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.660	<0.00855	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.400	<0.00855	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	
1,2-Dichlorobenzene	ug/L	3	<0.340	<0.360	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.230	
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.460	<0.420	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.200	
1,2-Dichloropropane	ug/L	1	<0.460	<0.520	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.250	
1,3-Dichlorobenzene	ug/L	3	<0.410	<0.420	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.230	
1,4-Dichlorobenzene	ug/L	3	<0.430	<0.330	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.230	
1,4-Dioxane	ug/L	NC	<20.2	<22.5 R	<22.5 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<3	<1	<1	<22.5 R	<0.301	
2-Butanone (MEK)	ug/L	50	<0.510	<0.630	<0.630	<0.550	6.4 J	0.88 J	<10	<10	<10	<10	12	<10	<10	<10	1.43 J	<0.550	
2-Hexanone	ug/L	50	<0.370	<0.260	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.260	<0.370	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.410	<0.510	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	0.15 J	<10	<10	<10	<0.510	<0.350	
Acetone	ug/L	50	1.37	<0.870	<0.870	<0.280	<4.0	5.39 J	<10	<10	1.50 J	<10	1.68 J	13	<10	2.62 J	5.13 J	<0.870	<0.280
Benzene	ug/L	1	<0.250	<0.430	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.250	
Bromochloromethane	ug/L	5	<0.560	<0.470	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.470	<0.300	
Bromodichloromethane	ug/L	50	0.767 J	<0.350	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.260	
Bromoform	ug/L	50	<0.520	<0.260	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.260	<0.460	
Bromomethane	ug/L	5	<0.680	<0.670	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.670	<0.250	
Carbon disulfide	ug/L	NC	<0.330	<0.500	<0.500	<0.300	<0.13	<1	<1	<1	<1	0.32 J	<1	<1	<1	<1	<0.500	<0.300	
Carbon tetrachloride	ug/L	5	<0.290	<0.400	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.360	
Chlorobenzene	ug/L	5	<0.420	<0.480	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.220	
Chloroethane	ug/L	5	<0.480	<0.780	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.780	<0.360	
Chloroform	ug/L	7	7.28	<0.340	<0.340	<0.220	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	
Chloromethane	ug/L	5	<0.430	<0.350	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	0.70 J	<1	<0.350	<0.280	
cis-1,2-Dichloroethene	ug/L	5	<0.560	<0.380	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.300	
cis-1,3-Dichloropropene	ug/L	0.4	<0.360	<0.360	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.250	
Cyclohexane	ug/L	NC	<0.230	<0.460	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.380	
Dibromochloromethane	ug/L	50	<0.430	<0.360	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.240	
Dichlorodifluoromethane	ug/L	5	<0.420	<0.420	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.290	
Ethylbenzene	ug/L	5	<0.340	<0.340	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	
Isopropylbenzene	ug/L	5	<0.300	<0.390	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.210	
Methyl acetate	ug/L	NC	<0.600	<0.350	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.220	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.450	<0.380	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.240	
Methylcyclohexane	ug/L	NC	<0.290	<0.460	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.360	
Methylene chloride	ug/L	5	<1.98	<1.98	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.98	<1.98	
Styrene	ug/L	5	<0.380	<0.330	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.250	
Tetrachloroethene	ug/L	5	<0.380	<0.470	<0.470	<0.330	0.16 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	26.2	9.53	
Toluene	ug/L	5	<0.230	<0.390	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.270	
trans-1,2-Dichloroethene	ug/L	5	<0.500	<0.550	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.350	
trans-1,3-Dichloropropene	ug/L	0.4	<0.450	<0.320	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.220	
Trichloroethene	ug/L	5	<0.440	<0.550	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.270	
Trichlorofluoromethane	ug/L	5	<0.220	<0.660	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.660	<0.450	
Vinyl Chloride	ug/L	2	<0.300	<0.460	<0.460	<0.290	<0.24	<1											

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB
		Screen Interval (ft above msl):	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8
		Date Sampled:	6/11/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/19/2011	5/2/2012	6/11/2013	7/17/2014 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards	On-Site Locations													Off-Site Downgradient Locations	
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.330	<0.10	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<0.067	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.310	<0.320	<0.067	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.420	<0.15	<1
1,1,2-Trichloroethane	ug/L	1	<0.039	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.220	<0.039	<1
1,1-Dichloroethane	ug/L	5	<0.041	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.260	<0.041	<1
1,1-Dichloroethene	ug/L	5	<0.055	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.710	<0.410	<0.055	<1
1,2,3-Trichlorobenzene	ug/L	5	<0.030	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.210	0.040 J	<1
1,2,4-Trichlorobenzene	ug/L	5	0.020 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.200	0.040 J	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.045	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	<0.045	<1
1,2-Dichlorobenzene	ug/L	3	<0.053	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.230	<0.053	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.039	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.200	<0.039	<1
1,2-Dichloropropane	ug/L	1	<0.045	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.250	<0.045	<1
1,3-Dichlorobenzene	ug/L	3	<0.027	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.230	<0.027	<1
1,4-Dichlorobenzene	ug/L	3	<0.036	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.230	<0.036	<1
1,4-Dioxane	ug/L	NC	<0.97	<5	<5	<5	<3	<1	<3	<1	<1	<1	<1	<22.5 R	<0.301	<0.97	<5
2-Butanone (MEK)	ug/L	50	4.3 J	0.79 J	<10	<10	<10	<10	11	<10	<10	1.70 J	<10	<0.630	<0.550	4.6 J	0.65 J
2-Hexanone	ug/L	50	<0.30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.260	<0.370	<0.30	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.14	<10	<10	<10	<10	<10	0.14 J	<10	<10	0.32 J	<10	<0.510	<0.350	<0.14	<10
Acetone	ug/L	50	<3.0	5.40 J	<10	1.57 J	<10	1.79 J	13	<10	2.14 J	6.22 J	3.35 J	<0.870	<0.280	<3.0	5.50 J
Benzene	ug/L	1	<0.014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.250	0.030 J	<1
Bromochloromethane	ug/L	5	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.470	<0.300	<0.13	<1
Bromodichloromethane	ug/L	50	<0.025	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.260	<0.025	<1
Bromoform	ug/L	50	<0.035	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.260	<0.460	<0.035	<1
Bromomethane	ug/L	5	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.510	<0.250	<0.13	<1
Carbon disulfide	ug/L	NC	<0.028	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.670	<0.300	<0.028	<1
Carbon tetrachloride	ug/L	5	<0.025	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.360	<0.025	<1
Chlorobenzene	ug/L	5	<0.032	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.220	<0.032	<1
Chloroethane	ug/L	5	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.360	<0.11	<1
Chloroform	ug/L	7	0.080 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.635 J	0.868 J	0.810 J	0.92 J
Chloromethane	ug/L	5	<0.072	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.280	<0.072	<1
cis-1,2-Dichloroethene	ug/L	5	<0.045	<1	0.22 J	<1	<1	<1	<1	0.26 J	<1	<1	<1	1.03	<0.300	<0.045	<1
cis-1,3-Dichloropropene	ug/L	0.4	<0.019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.250	<0.019	<1
Cyclohexane	ug/L	NC	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.380	<0.11	<1
Dibromochloromethane	ug/L	50	<0.031	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.240	<0.031	<1
Dichlorodifluoromethane	ug/L	5	<0.058	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.290	<0.058	<1
Ethylbenzene	ug/L	5	<0.011	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	<0.011	<1
Isopropylbenzene	ug/L	5	<0.014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.210	<0.014	<1
Methyl acetate	ug/L	NC	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.220	<0.15	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.039	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.240	<0.039	<1
Methylcyclohexane	ug/L	NC	<0.070	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.360	<0.070	<1
Methylene chloride	ug/L	5	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.98	<1.98	<0.10	<1
Styrene	ug/L	5	<0.016	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.250	<0.016	<1
Tetrachloroethene	ug/L	5	14	57	71	47	32	34	15	32	31	68	54	24.7	16	6	7
Toluene	ug/L	5	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.270	<0.17	<1
trans-1,2-Dichloroethene	ug/L	5	<0.072	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.350	<0.072	<1
trans-1,3-Dichloropropene	ug/L	0.4	<0.027	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.220	<0.027	<1
Trichloroethene	ug/L	5	<0.10	<1	<1	0.28 J	<1	<1	<1	0.30 J	<1	0.27 J	<1	6.71	2.81	3	4
Trichlorofluoromethane	ug/L	5	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.660	<0.450	<0.13	<1
Vinyl Chloride	ug/L	2	<0.066	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.290	<0.066	<1
Xylenes (Total)	ug/L	5	<0.041	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.630	<0.690	<0.041	<3
Total VOCs	ug/L	NA	14	63.19 J	71.22 J	48.85 J	32	35.79 J	39.14	32.26 J	33.14 J	76.51 J	57.35 J	33.1 J	19.7 J	6	18.07 J

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
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* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
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above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-8	MW-8	MW-8	DUP (MW-8)	MW-8	MW-8	MW-8	MW-8
		Screen Interval (ft above msl):	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/20/2011	4/30/2012	6/10/2013	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards														Off-Site Downgradient Locations		
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.330	<0.27	<1.4	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.310	<0.320	<0.27	<1.3	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.420	<0.46	<2.3	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.220	<0.34	7	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.260	<0.15	<0.73	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.710	<0.410	<0.27	<1.3	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.210	<0.25	<1.2	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.200	<0.24	<1.2	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.0080	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	<0.12	<0.61	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.230	<0.13	<0.67	<1	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.200	<0.17	<0.86	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.250	<0.18	<0.91	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.230	<0.20	<1.0	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.230	<0.18	<0.90	<1	<1	<1	<1
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<22.5 R	<0.301	<0.97	<0.97	<5	<5	<5	<3
2-Butanone (MEK)	ug/L	50	<10	<10	0.56 J	13	<10	<10	1.57 J	<10	<0.630	<0.550	6.3 J	<16	0.75 J	<10	<10	<10
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<0.260	<0.370	<0.19	<0.94	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	0.18 J	<10	<10	0.28 J	<10	<0.510	<0.350	<0.35	<1.8	<10	<10	<10	<10
Acetone	ug/L	50	1.43 J	<10	3.06 J	17	<10	2.21 J	3.55 J	2.35 J	<0.870	<0.280	<4.0	<20	5.26 J	<10	1.53 J	<10
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.250	<0.11	<0.56	<1	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.470	<0.300	<0.36	<1.8	<1	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.260	<0.19	<0.96	<1	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.260	<0.460	<0.35	<1.8	<1	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.510	<0.250	<0.18	<0.92	<1	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.670	<0.300	<0.13	<0.63	<1	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.360	<0.19	<0.94	<1	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.220	<0.16	<0.78	<1	<1	<1	<1
Chloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.360	<0.21	<1.1	<1	<1	<1	<1
Chloroform	ug/L	7	0.22 J	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	<0.15	<0.75	<1	<1	<1	<1
Chloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.280	<0.20	<0.98	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5	<1	0.29 J	<1	0.15 J	1	2	4	7	2.21	8.56	5	4.8 J	2	5	2	5
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.250	<0.17	<0.84	<1	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.380	<0.32	<1.6	<1	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.240	<0.20	<1.00	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.290	<0.57	<2.9	<1	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	<0.10	<0.51	<1	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.210	<0.12	<0.58	<1	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.220	<0.20	<1.0	<1	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.240	<0.25	<1.2	<1	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.360	<0.13	<0.64	<1	<1	<1	<1
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	0.47 J	<1.98	<1.98	<0.16	<0.81	<1	<1	0.36 J	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.250	<0.13	<0.64	<1	<1	<1	<1
Tetrachloroethene	ug/L	5	1	0.97 J	0.86 J	0.59 J	0.27 J	<1	0.32 J	0.27 J	21.3	26.3	1	<0.67	4	1	2	1
Toluene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.270	<0.17	<0.83	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.350	0.26 J	<0.72	0.22 J	0.31 J	0.26 J	0.30 J
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.220	<0.20	<1.0	<1	<1	<1	<1
Trichloroethene	ug/L	5	2	2	0.62 J	0.89 J	1	2	1	0.35 J	0.598 J	<0.270	0.38 J	9	0.42 J	0.35 J	0.26 J	0.49 J
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.660	<0.450	<0.28	<1.4	<1	<1	<1	<1
Vinyl Chloride	ug/L	2	<1	<1	<1	<1	<1	<1	<1	<1	2.67	3.34	<0.24	<1.2	16	14	17	12
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<3	<3	<0.630	<0.690	<0.58	<2.9	<3	<3	<3	<3
Total VOCs	ug/L	NA	4.65 J	3.26 J	5.1 J	31.81	1.27 J	6.21 J	10.72 J	10.44 J	26.8 J	39.5	5	20.8 J	28.65 J	20.66 J	23.41 J	18.79 J

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	
		Screen Interval (ft above msl):	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7
		Date Sampled:	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	6/8/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)		10/20/2011	4/30/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	6/8/2017 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards													Off-Site Downgradient Locations				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.700	<0.330	<1.4	<5	<1	<10	<5	<10	<20	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.620	<0.320	<1.3	<5	<1	<10	<5	<10	<20	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.880	<0.420	<2.3	<5	<1	<10	<5	<10	<20	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.720	<0.220	<1.7	<5	<1	<10	<5	<10	<20	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.860	<0.260	<0.73	<5	<1	<10	<5	<10	<20	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1.42	<0.410	<1.3	<5	<1	<10	<5	<10	<20	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.840	<0.210	<1.2	<5	<1	<10	<5	<10	<20	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.780	<0.200	<1.2	<5	<1	<10	<5	<10	<20	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	<0.61	<5	<1	<10	<5	<10	<20	<1	
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<0.720	<0.230	<0.67	<5	<1	<10	<5	<10	<20	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<0.840	<0.200	<0.86	<5	<1	<10	<5	<10	<20	<1	
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1.04	<0.250	<0.91	<5	<1	<10	<5	<10	<20	<1	
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<0.840	<0.230	<1.0	<5	<1	<10	<5	<10	<20	<1	
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<0.660	<0.230	<0.90	<5	<1	<10	<5	<10	<20	<1	
1,4-Dioxane	ug/L	NC	<1	<3	<1	<1	<1	<1	<45.1 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<1	
2-Butanone (MEK)	ug/L	50	<10	12	<10	<10	1.68 J	<10	<1.26	<0.550	<16	<50	<10	<100	1.7 J	<100	<200	<10	
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<0.520	<0.370	<0.94	<50	<10	<100	<50	<100	<200	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	0.13 J	<10	<10	0.22 J	<10	<1.02	<0.350	<1.8	<50	<10	<100	<50	<100	<200	<10	
Acetone	ug/L	50	1.2 J	13	<10	2.21 J	5.34 J	4.18 J	<1.74	<0.280	<20	6.9 J	<10	<100	<50	<100	<200	<10	
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<0.860	<0.250	<0.56	<5	<1	<10	<5	<10	<20	<1	
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<0.940	<0.300	<1.8	<5	<1	<10	<5	<10	<20	<1	
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<0.700	<0.260	<0.96	<5	<1	<10	<5	<10	<20	<1	
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<0.520	<0.460	<1.8	<5	<1	<10	<5	<10	<20	<1	
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1.34	<0.250	<0.92	<5	<1	<10	<5	<10	<20	<1	
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1.00	<0.300	<0.63	<5	<1	<10	<5	<10	<20	<1	
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<0.800	<0.360	<0.94	<5	<1	<10	<5	<10	<20	<1	
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.960	<0.220	<0.78	<5	<1	<10	<5	<10	<20	<1	
Chloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1.56	<0.360	<1.1	<5	<1	<10	<5	<10	<20	<1	
Chloroform	ug/L	7	<1	<1	<1	<1	<1	<1	2.23	<0.220	<0.75	<5	5	<10	<5	<10	<20	<1	
Chloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<0.700	<0.280	<0.98	<5	<1	<10	<5	<10	<20	<1	
cis-1,2-Dichloroethene	ug/L	5	2	5	4	4	2	2	7.32	3.98	4.4 J	9	<1	10	10	8.3 J	9.6 J	9	
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<0.720	<0.250	<0.84	<5	<1	<10	<5	<10	<20	<1	
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.920	<0.380	<1.6	<5	<1	<10	<5	<10	<20	<1	
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<0.720	<0.240	<1.00	<5	<1	<10	<5	<10	<20	<1	
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<0.840	<0.290	<2.9	<5	<1	<10	<5	<10	<20	<1	
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.680	<0.220	<0.51	<5	<1	<10	<5	<10	<20	<1	
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.780	<0.210	<0.58	<5	<1	<10	<5	<10	<20	<1	
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.700	<0.220	<1.0	<5	<1	<10	<5	<10	<20	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.760	<0.240	<1.2	<5	<1	<10	<5	<10	<20	<1	
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.920	<0.360	<0.64	<5	<1	<10	<5	<10	<20	0.21 J	
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	0.35 J	<3.96	<1.98	<0.81	<5	<1	<10	<5	<10	<20	<1	
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.660	<0.250	<0.64	<5	<1	<10	<5	<10	<20	<1	
Tetrachloroethene	ug/L	5	1	1	3	2	1	2	250	217 D	265	292	3	280	359	240	190	229	
Toluene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.780	<0.270	<0.83	<5	<1	<10	<5	<10	<20	<1	
trans-1,2-Dichloroethene	ug/L	5	0.20 J	0.27 J	0.33 J	0.24 J	0.20 J	0.24 J	<1.10	<0.350	<0.72	<5	<1	<10	<5	<10	<20	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<0.640	<0.220	<1.0	<5	<1	<10	<5	<10	<20	<1	
Trichloroethene	ug/L	5	0.24 J	0.50 J	0.59 J	0.50 J	<1	0.27 J	8.99	9.22	10	12	<1	10	14	10	14.2 J	14	
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1.32	<0.450	<1.4	<5	<1	<10	<5	<10	<20	<1	
Vinyl Chloride	ug/L	2	20	8	19	13	12	12	<0.920	<0.290	<1.2	<5	<1	<10	<5	<10	<20	<1	
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<1.26	<0.690	<2.9	<20	<3	<30	<20	<30	<60	<3	
Total VOCs	ug/L	NA	24.64 J	39.9	7.00 J	21.95 J	22.44 J	21.04 J	269	230	275	319.9 J	8	300	384.7 J	258.3 J	213.8	238 J	

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above the MDL.
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units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-8SB	MW-8SB	MW-8SB	DUP (MW-8SB)	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	
		Screen Interval (ft above msl):	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	172.3 - 182.3	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8
		Date Sampled:	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	04/26/2019 (Post ISCO)	10/20/2011	5/1/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards												Off-Site Downgradient Locations					
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<5	<10	<1	<1	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<5	<10	<1	<1	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<5	<10	<1	<1	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<5	<10	<1	<1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<5	<10	<1	<1	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<5	<10	<1	<1	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<5	<10	<1	<1	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<5	<10	<1	<1	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<5	<10	<1	<1	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<5	<10	<1	<1	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<5	<10	<1	<1	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<5	<10	<1	<1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<5	<10	<1	<1	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<5	<10	<1	<1	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<1	<1	<1	<1	<22.5 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<3	<1	<1	
2-Butanone (MEK)	ug/L	50	<50	<100	<10	<10	<0.630	<0.550	3.7 J	1.09 J	<10	<10	<10	<10	<10	<10	<10	1.96 J	
2-Hexanone	ug/L	50	<50	<100	<10	<10	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<50	<100	<10	<10	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	<10	<10	<10	0.41 J	
Acetone	ug/L	50	<50	23.7 J	1.94 J	3.38 J	<0.870	<0.280	<4.0	5.10 J	<10	1.60 J	<10	2.63 J	41	<10	2.01 J	6.13 J	
Benzene	ug/L	1	<5	<10	<1	<1	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<5	<10	<1	<1	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<5	<10	<1	<1	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	ug/L	50	<5	<10	<1	<1	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromomethane	ug/L	5	<5	<10	<1	<1	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<5	<10	<1	<1	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<5	<10	<1	<1	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<5	<10	<1	<1	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	ug/L	5	<5	<10	<1	<1	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	ug/L	7	<5	<10	<1	<1	9.28	<0.220	<0.15	<1	<1	<1	<1	<1	0.11 J	<1	<1	0.32 J	
Chloromethane	ug/L	5	<5	<10	<1	<1	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	8	10	7	7	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<5	<10	<1	<1	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<5	<10	<1	<1	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<5	<10	<1	<1	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<5	<10	<1	<1	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<5	<10	<1	<1	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<5	<10	<1	<1	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<5	<10	<1	<1	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<5	<10	<1	<1	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<5	<10	<1	<1	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylene chloride	ug/L	5	<5	<10	0.31 J	0.30 J	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Styrene	ug/L	5	<5	<10	<1	<1	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	271	360	177	168	<0.470	<0.330	0.18 J	<1	0.38 J	<1	0.25 J	<1	0.31 J	<1	0.31 J	<1	
Toluene	ug/L	5	<5	<10	<1	<1	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	ug/L	5	<5	<10	<1	<1	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<5	<10	<1	<1	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	ug/L	5	14	20	14	13	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<5	<10	<1	<1	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	<5	<10	<1	<1	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<20	<30	<3	<3	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Total VOCs	ug/L	NA	293	413.7 J	200.25 J	191.68 J	9.28	---	---	6.19 J	0.38 J	1.60 J	0.25 J	2.63 J	41.42	---	2.32 J	8.82 J	

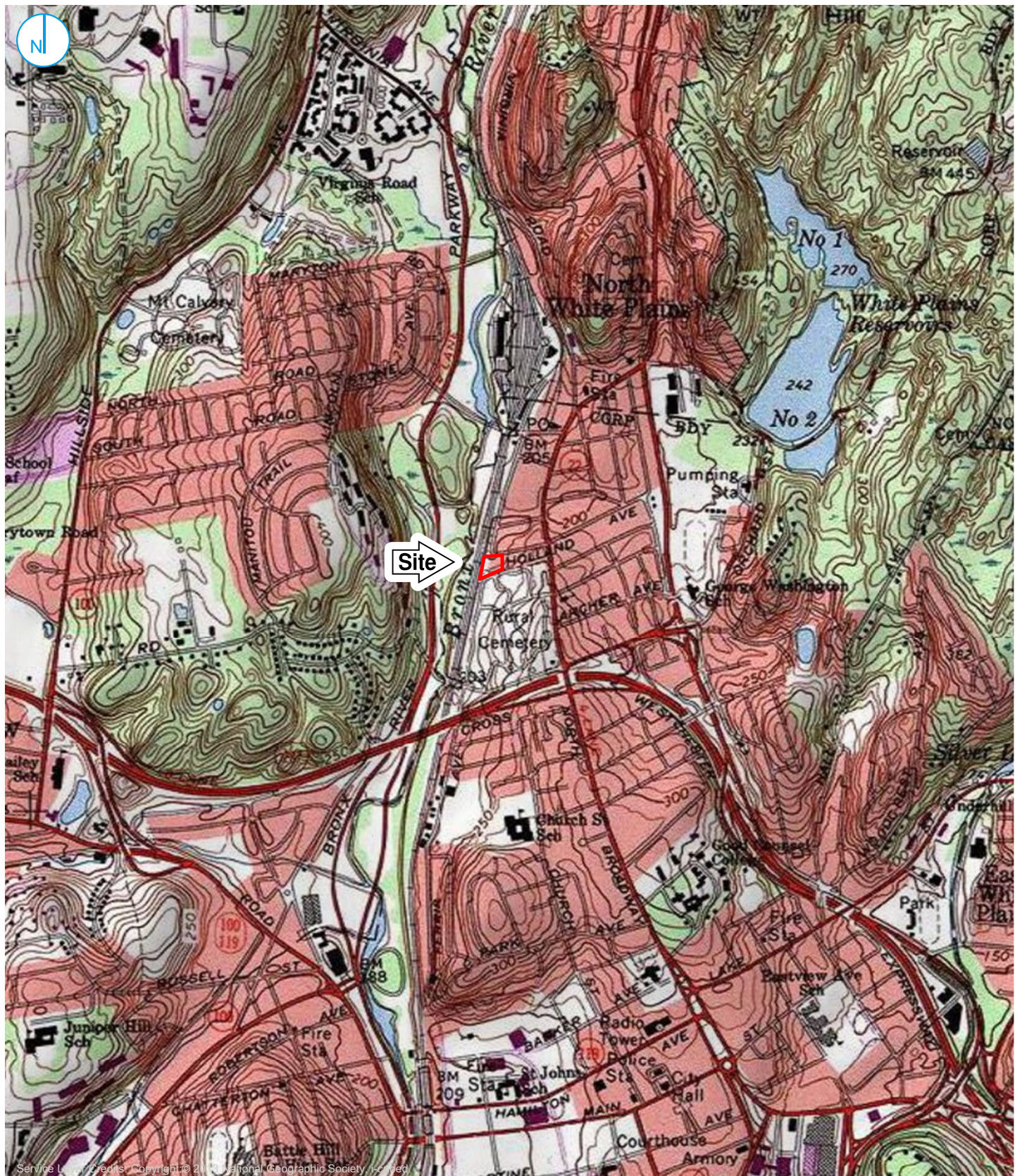
Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Serie
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
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ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-9	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	
		Screen Interval (ft above msl):	175.8 - 185.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8
		Date Sampled:	04/26/2019 (Post ISCO)	10/20/2011	5/2/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards											Off-Site Downgradient Locations				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<1	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<1	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<1	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<1	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<1	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<1	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<1	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<1	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<1	<22.5 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	
2-Butanone (MEK)	ug/L	50	<10	<0.630	<0.550	<3.3	0.69 J	<10	<10	<10	<10	<10	<10	<10	1.31 J	<10	
2-Hexanone	ug/L	50	<10	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	0.10 J	<10	<10	0.17 J	<10	
Acetone	ug/L	50	3.17 J	<0.870	<0.280	<4.0	4.63 J	<10	1.70 J	<10	1.29 J	42	<10	2.61 J	4.95 J	2.82 J	
Benzene	ug/L	1	<1	2	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<1	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<1	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	ug/L	50	<1	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromomethane	ug/L	5	<1	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<1	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<1	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<1	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	ug/L	5	<1	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	ug/L	7	<1	3.81	0.563 J	<0.94 J	0.88 J	0.88 J	0.86 J	0.83 J	0.61 J	0.53 J	0.48 J	0.40 J	<1	0.20 J	
Chloromethane	ug/L	5	<1	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	0.70 J	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	<1	1.55	1.14	0.36 J	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<1	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<1	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<1	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<1	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<1	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<1	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<1	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<1	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	0.32 J	<1	<1	<1	
Methylene chloride	ug/L	5	<1	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	0.10 J	<1	<1	<1	0.32 J	
Styrene	ug/L	5	<1	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	<1	1.23	1.09	0.30 J	0.34 J	0.26 J	0.21 J	<1	<1	<1	<1	<1	0.28 J	0.49 J	
Toluene	ug/L	5	<1	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	ug/L	5	<1	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<1	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	ug/L	5	<1	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<1	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	<1	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<3	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Total VOCs	ug/L	NA	3.17 J	8.59	2.79 J	0.66	6.54 J	1.14 J	2.77 J	0.83 J	1.9 J	42.88	1.5 J	3.01 J	6.71 J	3.83 J	

Notes:
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D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

FIGURES



KEY MAP

Map Scale: 1:1,24,000;
Map Center: 73°46'18"W 41°2'54"N

0 1,000 2,000
Feet

SITE LOCATION BROWNFIELD SITE MANAGEMENT PLAN

Program No. C360115
1-5 Holland Avenue
White Plains, NY

FIGURE 01

RAMBOLL US CORPORATION
A RAMBOLL COMPANY





PROPERTY BOUNDARY

SITE PLAN
BROWNFIELD PERIODIC REVIEW REPORT

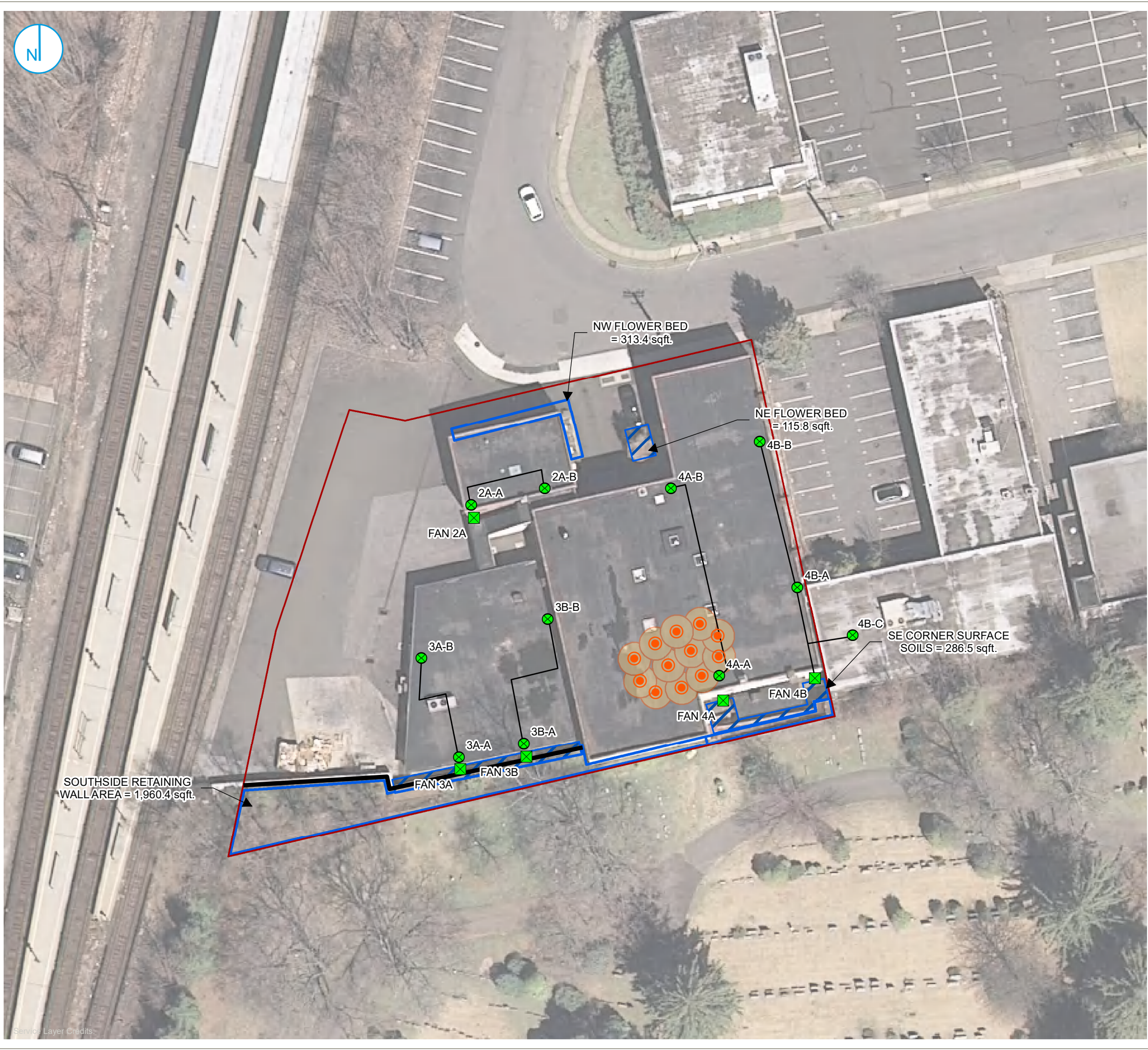
FIGURE 02



Program No. C360115
1-5 Holland Avenue
White Plains, NY

RAMBOLL US CORPORATION
A RAMBOLL COMPANY





LEGEND

APPROXIMATE SUB-SLAB DEPRESSURIZATION SYSTEM

- FAN
- SUCTION POINT
- EXHAUST PIPE
- RETAINING WALL
- APPROXIMATE PROPERTY BOUNDARY AND LIMITS OF COMPOSITE COVER SYSTEM
- EXPOSED SURFACE SOIL AREA REMAINING IN PLACE
- EXPOSED SURFACE SOIL AREA EXCAVATED
- IP CLUSTER LOCATION

0 50 100 Feet

REMEDIAL MEASURES
ENGINEERING CONTROLS
BROWNFIELD PERIODIC REVIEW
REPORT

Program No. C360115
1-5 Holland Avenue
White Plains, NY

FIGURE 03

RAMBOLL US CORPORATION
A RAMBOLL COMPANY





LEGEND

- OVERBURDEN MONITORING WELL
- GROUNDWATER CONTOUR

NOTE:

ALL GROUNDWATER ELEVATIONS ARE MEASURED AS FEET ABOVE MEAN SEA LEVEL (ft amsl) TO THE VERTICAL DATUM NAVD88.

0 35 70 140 Feet

**PERIODIC REVIEW REPORT
OVERBURDEN GROUNDWATER
ELEVATION CONTOURS
4/4/2019**

**BROWNFIELD CLEANUP
PROGRAM NO. C360115**
1-5 HOLLAND AVENUE
WHITE PLAINS, NY

FIGURE 4

MAY 2020
14206.72276

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY





LEGEND

◆ SHALLOW BEDROCK MONITORING WELL

— GROUNDWATER CONTOUR

NOTE:

ALL GROUND WATER ELEVATIONS ARE MEASURED AS FEET ABOVE MEAN SEA LEVEL (ft amsl) TO THE VERTICAL DATUM NAVD88.



PERIODIC REVIEW REPORT
SHALLOW BEDROCK GROUNDWATER
ELEVATION CONTOURS
4/4/2019

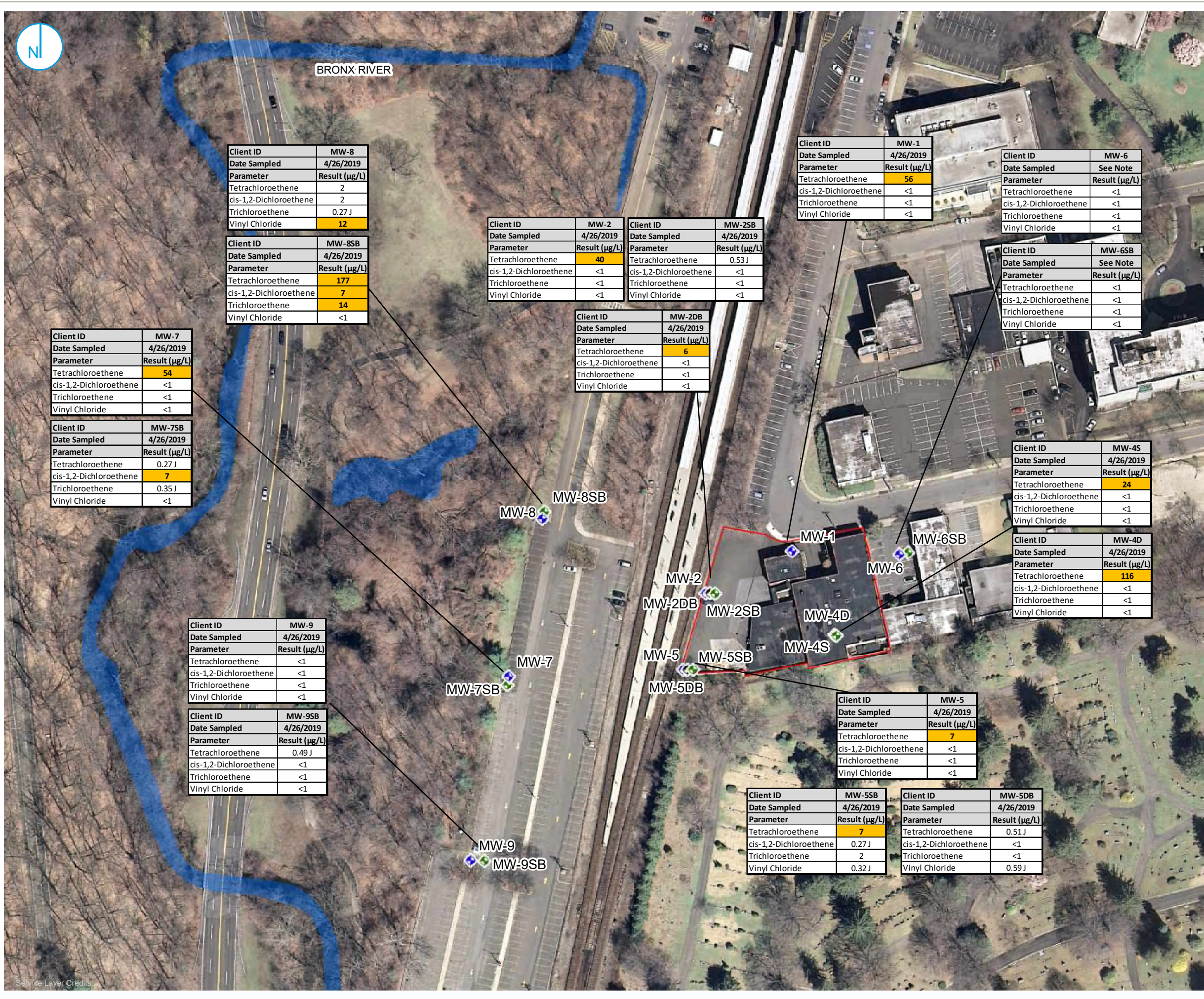
BROWNFIELD CLEANUP
PROGRAM NO. C360115
1-5 HOLLAND AVENUE
WHITE PLAINS, NY

FIGURE 5

MAY 2020
14206.72276

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY





LEGEND

- OVERBURDEN MONITORING WELL
- SHALLOW BEDROCK MONITORING WELL
- DEEP BEDROCK MONITORING WELL
- SURFACE WATER
- SITE BORDER

NOTE:
MW-6 AND MW-6SB WERE DECOMMISSIONED IN DECEMBER 2018. MONITORING RESULTS PRIOR TO DECOMMISSIONING FOR THESE TWO UPGRADIENT WELLS WAS NON-DETECT.

Client ID	MW-1
Date Sampled	4/26/2019
Parameter	Result (µg/L)
Tetrachloroethene	56
cis-1,2-Dichloroethene	<1
Trichloroethene	<1
Vinyl Chloride	<1

(EXCEEDS TOGS 1.1.1 CLASS GA STANDARDS/CRITERIA) VALUES IN UG/L

J = THE CONCENTRATION WAS DETECTED AT A VALUE BELOW THE REPORTING LIMIT AND ABOVE THE METHOD DETECTION LIMIT.



**TETRACHLOROETHENE AND
DEGRADATION PRODUCTS
GROUNDWATER RESULTS
(APRIL 2019)
BROWNFIELD PERIODIC REVIEW
REPORT**

PROGRAM NO. C360115
1-5 HOLLAND AVENUE
WHITE PLAINS, NY

FIGURE 6



ATTACHMENTS



ATTACHMENT A
IC/EC CERTIFICATION FORM



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site No.	C360115	Site Details	Box 1
Site Name 1-5 Holland Avenue			
Site Address: 1-5 Holland Avenue		Zip Code: 10603	
City/Town: White Plains			
County: Westchester			
Site Acreage: 0.722			
Reporting Period: March 23, 2019 to March 23, 2020			
			YES NO
1.	Is the information above correct?	x	☐
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	x	☐
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	x	☐
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	x
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5.	Is the site currently undergoing development?	☐	x

			Box 2
			YES NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	x	☐
7.	Are all ICs/ECs in place and functioning as designed?	x	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 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	Date
--	------

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

☐ YES ☒ NO

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)

☒ YES ☐ NO

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C360115**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**125.07-1-1**

1 Holland Ave Storage LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- requires compliance with the Department approved Site Management Plan.

Box 4**Description of Engineering Controls**ParcelEngineering Control**125.07-1-1**

Vapor Mitigation
Cover System

1. Site cover system which is comprised of structures such as buildings, pavement, sidewalks comprising the site development and a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs) for commercial use.

2. Vapor mitigation system in the on-site building, consisting of five separate sub-slab depressurization systems to mitigate the entire building. The system also influences a portion of the adjacent property building.

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 complete.

YES NO

x ☐

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

x ☐

**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

Date

IC CERTIFICATIONS
SITE NO. C360115

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.

The Frink Law Firm LLC
250 East 5th St, STE 1500

I NEAL FRINK at Cincinnati, OH 45202
print name print business address

am certifying as REMEDIAL PARTY* (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

[Signature]
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

8-20-20
Date

* One Holland Avenue Development LLC

IC/EC CERTIFICATIONS

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.

I Douglas M. Crawford at O'Brien & Gere Engineers, Inc., 333 W. Washington Street, Syracuse, NY 13221,

print name

print business address

am certifying as a Professional Engineer for the _____ Remedial Party _____.



Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification



(Required for PE)

8/20/2020

Date

Cole Schotz P.C.

Jill B. Richardson
Associate
Admitted in NY and NJ

Reply to New York Office
Writer's Direct Line: 646-563-8953
Writer's Direct Fax: AuthorFaxNo
Writer's E-Mail: JRichardson@coleschotz.com

1325 Avenue of the Americas, 19th Floor
New York, NY 10019
212-752-8000 212-752-8393 fax
—
New Jersey
—
Delaware
—
Maryland
—
Texas
—
Florida

September 10, 2019

Via Federal Express

Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany NY 12233-7020

Re: 1-5 Holland Ave, White Plains, NY 10603
DEC Site ID No. C360115

To Whom It May Concern

Please see the enclosed Advance Notification of Site Change of Use and Transfer of Certification of Completion in connection with the sale of the referenced property.

Please reach out to me with any questions or concerns.

Very truly yours,

COLE SCHOTZ P.C.



Jill B. Richardson

JBR:apb
Enclosure
cc: Kiera Thompson, P.G., NYSDEC – (via email)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



**60-Day Advance Notification of Site Change of Use, Transfer of
Certificate of Completion, and/or Ownership**

Required by 6NYCRR Part 375-1.11(d) and 375-1.9(f)

To be submitted at least 60 days prior to change of use to:

Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation, 625 Broadway
Albany NY 12233-7020

I. Site Name: 1-5 Holland Ave. **DEC Site ID No.** C360115

II. Contact Information of Person Submitting Notification:

Name: Thomas Attonito on behalf of 1 Holland LLC
Address1: 2 Birch Street, White Plains, NY 10604
Address2: _____
Phone: 914-879-6962 E-mail: tattonito@yahoo.com

III. Type of Change and Date: Indicate the Type of Change(s) (check all that apply):

- ☒ Change in Ownership or Change in Remedial Party(ies)
☒ Transfer of Certificate of Completion (CoC)
☐ Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy): 9/18/2019

IV. Description: Describe proposed change(s) indicated above and attach maps, drawings, and/or parcel information.

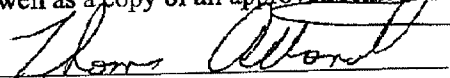
Sale of property.

If "Other," the description must explain and advise the Department how such change may or may not affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

- V. Certification Statement:** Where the change of use results in a change in ownership or in responsibility for the proposed, ongoing, or completed remedial program for the site, the following certification must be completed (by owner or designated representative; see §375-1.11(d)(3)(i)):

I hereby certify that the prospective purchaser and/or remedial party has been provided a copy of any order, agreement, Site Management Plan, or State Assistance Contract regarding the Site's remedial program as well as a copy of all approved remedial work plans and reports.

Name:


(Signature)

9-9-19

(Date)

Thomas Attonito for 1 Holland LLC

(Print Name)

Address1: 2 Birch Street, White Plains, NY 10604

Address2:

Phone: 914-879-6962

E-mail: tattonito@yahoo.com

- VI. Contact Information for New Owner, Remedial Party, or CoC Holder:** If the site will be sold or there will be a new remedial party, identify the prospective owner(s) or party(ies) along with contact information. If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/ECs), indicate who will be the certifying party (attach additional sheets if needed).

☒ Prospective Owner ☐ Prospective Remedial Party ☒ Prospective Owner Representative

Name: Rothko LLC c/o Clutter, Inc.

Address1: 3526 Hayden Avenue, Culver City, CA 90232

Address2:

Phone: TBD

E-mail: ari@clutter.com

Certifying Party Name: Ari Mir

Address1: 3526 Hayden Avenue, Culver City, CA 90232

Address2:

Phone: TBD

E-mail: ari@clutter.com

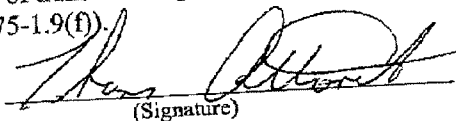
VII. Agreement to Notify DEC after Transfer: If Section VI applies, and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of the CoC for the site, the CoC should be transferred to the new owner using DEC's form found at <http://www.dec.ny.gov/chemical/54736.html>. This form has its own filing requirements (see 6NYCRR Part 375-1.9(f)).

Signing below indicates that these notices will be provided to the DEC within the specified time frames. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the notice required by VII.1 below (which normally must be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at <http://www.dec.ny.gov/chemical/54736.html> (see §375-1.9(f)).

Name:


(Signature)

9-9-09
(Date)

Thomas Attonito for 1 Holland LLC
(Print Name)

Address1: 2 Birch Street, White Plains, NY 10604

Address2: _____

Phone: _____

914-879-6962

E-mail: tattonito@yahoo.com

SCHEDULE A
Legal Description
1-5 Holland Avenue
BCP Site #C360115

Real property in the City of White Plains, County of Westchester, State of New York, described as follows:

PARCEL I

ALL THOSE CERTAIN LOTS, PIECES OR PARCELS OF LAND, SITUATE, LYING AND BEING IN THE CITY OF WHITE PLAINS, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, KNOWN AND DESIGNATED AS LOT NUMBERS 1, 2, 3, 4 AND 13 IN BLOCK 3, ON A CERTAIN MAP ENTITLED,

"MAP OF NORTH WHITE PLAINS, THE TERMINAL CITY, SITUATED IN THE TOWN AND VILLAGE OF WHITE PLAINS AND THE TOWN OF NORTH CASTLE, IN THE COUNTY OF WESTCHESTER AND STATE OF NEW YORK, SURVEYED FOR NEW YORK SUBURBS CO." MADE BY LEWIS T. HANEY, CIVIL ENGINEER AND CITY SURVEYOR, 1907 AND FILED IN THE COUNTY CLERK'S OFFICE, DIVISION OF LAND RECORDS, FORMERLY REGISTER'S OFFICE OF WESTCHESTER COUNTY, SEPTEMBER 23, 1907 AS MAP NUMBER 1749 AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF HOLLAND AVENUE WITH THE EASTERLY SIDE OF LANDS OF NEW YORK CENTRAL RAILROAD;

RUNNING THENCE ALONG THE SOUTHERLY SIDE OF HOLLAND AVENUE, NORTH 88° 12' 40" EAST 140 FEET TO A POINT ON THE WESTERLY SIDE OF LOT NO. 5;

THENCE ALONG THE SAME, SOUTH 1° 47' 20" EAST 150.65 FEET TO A POINT;

THENCE SOUTH 87° 58' WEST 76.28 FEET AND SOUTH 88° 14' 00" WEST 135.27 FEET TO THE EASTERLY SIDE OF LAND OF NEW YORK CENTRAL RAILROAD;

THENCE ALONG THE SAME, NORTH 23° 34' 54" EAST 167 FEET TO THE POINT OR PLACE OF BEGINNING.

PARCEL II

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE CITY OF WHITE PLAINS, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEASTERLY CORNER OF THE PREMISES DESCRIBED AND DESIGNATED AS PARCEL NO. 1 IN DEED FROM MARGARETTA S. CLARK TO THE NEW YORK CENTRAL AND HUDSON RIVER RAILROAD COMPANY, DATED APRIL 9, 1901 RECORDED IN THE OFFICE OF THE CLERK OF SAID COUNTY OF WESTCHESTER, NOW DIVISION OF LAND RECORDS IN LIBER 1577 OF DEEDS AT PAGE 216; AND

RUNNING THENCE WESTERLY ALONG THE SOUTHERLY LINE OF SAID PARCEL NO. 1 DESCRIBED IN DEED DATED AND RECORDED AS AFORESAID SOUTH 88° 10' 50" WEST 33.08 FEET TO THE SOUTHWESTERLY CORNER THEREOF, SAID CORNER BEING DISTANT SOUTHEASTERLY 41.25 FEET MEASURED AT RIGHT ANGLES FROM THE ORIGINAL CENTER LINE OF THE NEW YORK AND HARLEM RAILROAD, SAID CENTER LINE BEING MARKED BY STONE MONUMENT SET IN THE GROUND;

THENCE NORTH 22° 55' 50" EAST 90 FEET, TO A POINT OPPOSITE CHAINING STATION 125 PLUS 057.30 IN SAID MONUMENTED CENTER LINE;

THENCE NORTH 29° 09' 05" EAST 91.39 FEET TO A POINT DISTANT SOUTHEASTERLY 51.15 FEET MEASURED AT RIGHT ANGLES FROM SAID MONUMENTED CENTER LINE AT CHAINING STATION 125 PLUS 148.12 FEET THEREIN;

THENCE SOUTH 67° 06' 12" EAST 22.25 FEET (22.04 FEET SURVEY) TO A POINT IN THE SOUTHEASTERLY LINE OF PARCEL NO. 1 IN DEED DATED AND RECORDED AFORESAID WHERE THE SAME IS INTERSECTED BY THE SOUTHERLY LINE OF HOLLAND AVENUE;

THENCE SOUTHWESTERLY ALONG SAID SOUTHEASTERLY LINE OF SAID PARCEL NO. 1 IN DEED DATED AND RECORDED AFORESAID SOUTH 23° 34' 54" WEST 167 FEET TO THE POINT OR PLACE OF BEGINNING.



Jill B. Richardson
Associate
Admitted in NY and NJ

Reply to New York Office
Writer's Direct Line: 646-563-8953
Writer's Direct Fax: AuthorFaxNo
Writer's E-Mail: JRichardson@coleschotz.com

1325 Avenue of the Americas, 19th Floor
New York, NY 10019
212-752-8000 212-752-8393 fax
—
New Jersey
—
Delaware
—
Maryland
—
Texas
—
Florida

October 18, 2019

Via Federal Express

Chief, Site Control Section New York State of
Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7020

Re: 1-5 Holland Avenue, White Plains, New York 10603
DEC Site ID No.: C360115
Post-Notification - Notice of Transfer of Certificate of Completion

To Whom It May Concern:

In connection with the transfer of the Certificate of Completion from 1 Holland LLC to 1 Holland Ave Storage LLC for the above-referenced site, please see the enclosed Notice of Transfer of Certificate of Completion and proof of recording with the Westchester County Office of the County Clerk.

The contact person for 1 Holland Ave Storage LLC is:

Cameron Maloney
Clutter Inc.
General Manager - Self-Storage
3526 Hayden Avenue, Culver City CA, 90232
805-252-4917
cameron.maloney@clutter.com

Cole Schotz P.C.

Chief, Site Control Section New York State of Environmental Conservation
October 18, 2019
Page 2

One Holland Avenue Development, LLC will continue to undertake the obligations under the Site Management Plan.

Very truly yours,

/s/ Jill B. Richardson

Jill B. Richardson

JBR:sad

Enclosures

cc: Kiera Thompson, P.G., NYSDEC - (via email)
Neal Frink - (via email)

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.



592893625DLR001D

Westchester County Recording & Endorsement Page

Submitter Information

Name: Langdon Title Agency, LLC Phone: 212-686-6650
Address 1: 463 Seventh Avenue, Suite 701 Fax: 212-689-6449
Address 2: Email: info@langdontitle.com
City/State/Zip: New York NY 10018 Reference for Submitter: LTA-6666D

Document Details

Control Number: **592893625** Document Type: **Declaration (DLR)**
Package ID: 2019101600293001001 Document Page Count: **6** Total Page Count: **7**

Parties

☐ Additional Parties on Continuation page

1st PARTY

2nd PARTY

1: 1 HOLLAND LLC - Other 1: 1 HOLLAND AVE STORAGE LLC - Other
2: 2:

Property

☐ Additional Properties on Continuation page

Street Address: 1-5 HOLLAND AVENUE Tax Designation: 125.07-1-1
City/Town: WHITE PLAINS Village:

Cross- References

☐ Additional Cross-Refs on Continuation page

1: 550203483 2: 3: 4:

Supporting Documents

Recording Fees

Statutory Recording Fee: \$40.00
Page Fee: \$35.00
Cross-Reference Fee: \$0.50
Mortgage Affidavit Filing Fee: \$0.00
RP-5217 Filing Fee: \$0.00
TP-584 Filing Fee: \$0.00
Total Recording Fees Paid: **\$75.50**

Transfer Taxes

Consideration: \$0.00
Transfer Tax: \$0.00
Mansion Tax: \$0.00
Transfer Tax Number:

Mortgage Taxes

Document Date:
Mortgage Amount:

Basic: \$0.00
Westchester: \$0.00
Additional: \$0.00
MTA: \$0.00
Special: \$0.00
Yonkers: \$0.00
Total Mortgage Tax: **\$0.00**

Dwelling Type: Exempt: ☐
Serial #:

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK



Recorded: 10/18/2019 at 12:42 PM
Control Number: **592893625**
Witness my hand and official seal

Timothy C. Idoni

Timothy C. Idoni
Westchester County Clerk

Record and Return To

☐ Pick-up at County Clerk's office

Cole Schotz P.C.
1325 Avenue of the Americas
19th Floor
New York, NY 10019
Attn: Jill B. Richardson

NOTICE OF TRANSFER OF CERTIFICATE OF COMPLETION

Brownfield Cleanup Program

Pursuant to 6 NYCRR Part 375-1.9(f)

1-5 Holland Avenue, C360115

1-5 Holland Avenue, White Plains, NY 10603

PLEASE TAKE NOTICE, that pursuant to Article 27, title 14 of the Environmental Conservation Law and 6 NYCRR 375-1.9(f), 1 Holland LLC hereby transfer(s) the Certificate of Completion (COC) issued by the Department of Environmental Conservation on December 23, 2014 for the site described below. Such COC was issued upon satisfaction of the Commissioner, following review by the Department of the final engineering report and data submitted pursuant to the Brownfield Cleanup Agreement, as well as any other relevant information regarding the Site, that the remediation requirements set forth in ECL Article 27, title 14 had been or would be achieved in accordance with the time frame, if any, established in the remedial work plan.

PLEASE TAKE NOTICE, that 1-5 Holland Avenue (site) is located at 1-5 Holland Avenue, White Plains, NY 10603, Westchester County. The Site is bearing DEC site number: C360115 and is more fully described on Schedule A attached hereto ("Site"). The Tax Map Identification Number(s) for site is/are 125.07-1-1.

PLEASE TAKE NOTICE, that a Notice of Certificate of Completion for the Site was filed in the Westchester County Clerk's Office on January 23, 2015 as Control Number 550203483.

PLEASE TAKE NOTICE, that on September 18, 2019 1 Holland LLC conveyed title to the Site to 1 Holland Ave Storage LLC by Deed recorded as Control Number 592563114 in the Office of the Westchester County Clerk's Office.

PLEASE TAKE NOTICE, 1 Holland LLC hereby transfers the Certificate to the following new property owner(s) as provided for pursuant to Article 27, title 14 of the Environmental Conservation Law and 6 NYCRR 375-1.9(f):

1 Holland Ave Storage LLC

c/o Clutter, Inc.
3526 Hayden Avenue
Culver City, CA 90232

84-2852711
(Employer Identification Number)

Cameron Maloney
Representative (if applicable)

PLEASE TAKE FURTHER NOTICE, that if there is an environmental easement for this site, that 1 Holland Ave Storage LLC recognize(s) and agree(s) to implement the Department-approved Site Management Plan, and any amendments thereto, and to fully comply with all restrictions and affirmative obligations contained therein as well as in the Environmental Easement for the Site.

WHEREFORE, the undersigned have signed this Notice of Transfer of Certificate of Completion as of this 3rd of September, 2019.

[SIGNATURE PAGES TO FOLLOW]

State of NY
County of NY

On the 17th day of September in the year 2019, before me the undersigned notary public, personally appeared Dino Tomassetti, Jr., personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

1 Holland LI


By: Dino Tomassetti, Jr.
Authorized Signatory

Sworn to before me this
17th of September, 2019.



BASIRA R. MIAH
Notary Public, State of New York
No. 01Mf6324356
Qualified in Queens County
Commission Expires 05/04/2023

State of NY
County of NY

On the 17th day of September in the year 2019, before me the undersigned notary public, personally appeared Ari Mir personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Sworn to before me this
17 of September, 2019.

RUSWIN Kaur Sandhu

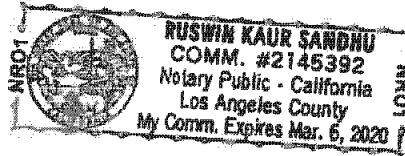
a

1 Holland Ave Storage LLC

By:

Ari Mir

Authorized Signatory



State of _New York_)

County of _____New York_____)

On the _17th_ day of _September_ in the year _2019_, before me, the undersigned notary public, personally appeared ___Ari Mir___, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

1 Holland Ave Storage LLC

SCHEDULE A
Legal Description
1-5 Holland Avenue
BCP Site #C360115

Real property in the City of White Plains, County of Westchester, State of New York, described as follows:

PARCEL I

ALL THOSE CERTAIN LOTS, PIECES OR PARCELS OF LAND, SITUATE, LYING AND BEING IN THE CITY OF WHITE PLAINS, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, KNOWN AND DESIGNATED AS LOT NUMBERS 1, 2, 3, 4 AND 13 IN BLOCK 3, ON A CERTAIN MAP ENTITLED,

"MAP OF NORTH WHITE PLAINS, THE TERMINAL CITY, SITUATED IN THE TOWN AND VILLAGE OF WHITE PLAINS AND THE TOWN OF NORTH CASTLE, IN THE COUNTY OF WESTCHESTER AND STATE OF NEW YORK, SURVEYED FOR NEW YORK SUBURBS CO." MADE BY LEWIS T. HANEY, CIVIL ENGINEER AND CITY SURVEYOR, 1907 AND FILED IN THE COUNTY CLERK'S OFFICE, DIVISION OF LAND RECORDS, FORMERLY REGISTER'S OFFICE OF WESTCHESTER COUNTY, SEPTEMBER 23, 1907 AS MAP NUMBER 1749 AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE SOUTHERLY SIDE OF HOLLAND AVENUE WITH THE EASTERLY SIDE OF LANDS OF NEW YORK CENTRAL RAILROAD;

RUNNING THENCE ALONG THE SOUTHERLY SIDE OF HOLLAND AVENUE, NORTH 88° 12' 40" EAST 140 FEET TO A POINT ON THE WESTERLY SIDE OF LOT NO. 5;

THENCE ALONG THE SAME, SOUTH 1° 47' 20" EAST 150.65 FEET TO A POINT;

THENCE SOUTH 87° 58' WEST 76.28 FEET AND SOUTH 88° 14' 00" WEST 135.27 FEET TO THE EASTERLY SIDE OF LAND OF NEW YORK CENTRAL RAILROAD;

THENCE ALONG THE SAME, NORTH 23° 34' 54" EAST 167 FEET TO THE POINT OR PLACE OF BEGINNING.

PARCEL II

ALL THAT CERTAIN PLOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN THE CITY OF WHITE PLAINS, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEASTERLY CORNER OF THE PREMISES DESCRIBED AND DESIGNATED AS PARCEL NO. 1 IN DEED FROM MARGARETTA S. CLARK TO THE NEW YORK CENTRAL AND HUDSON RIVER RAILROAD COMPANY, DATED APRIL 9, 1901 RECORDED IN THE OFFICE OF THE CLERK OF SAID COUNTY OF WESTCHESTER, NOW DIVISION OF LAND RECORDS IN LIBER 1577 OF DEEDS AT PAGE 216; AND

RUNNING THENCE WESTERLY ALONG THE SOUTHERLY LINE OF SAID PARCEL NO. 1 DESCRIBED IN DEED DATED AND RECORDED AS AFORESAID SOUTH $88^{\circ} 10' 50''$ WEST 33.08 FEET TO THE SOUTHWESTERLY CORNER THEREOF, SAID CORNER BEING DISTANT SOUTHEASTERLY 41.25 FEET MEASURED AT RIGHT ANGLES FROM THE ORIGINAL CENTER LINE OF THE NEW YORK AND HARLEM RAILROAD, SAID CENTER LINE BEING MARKED BY STONE MONUMENT SET IN THE GROUND;

THENCE NORTH $22^{\circ} 55' 50''$ EAST 90 FEET, TO A POINT OPPOSITE CHAINING STATION 125 PLUS 057.30 IN SAID MONUMENTED CENTER LINE;

THENCE NORTH $29^{\circ} 09' 05''$ EAST 91.39 FEET TO A POINT DISTANT SOUTHEASTERLY 51.15 FEET MEASURED AT RIGHT ANGLES FROM SAID MONUMENTED CENTER LINE AT CHAINING STATION 125 PLUS 148.12 FEET THEREIN;

THENCE SOUTH $67^{\circ} 06' 12''$ EAST 22.25 FEET (22.04 FEET SURVEY) TO A POINT IN THE SOUTHEASTERLY LINE OF PARCEL NO. 1 IN DEED DATED AND RECORDED AFORESAID WHERE THE SAME IS INTERSECTED BY THE SOUTHERLY LINE OF HOLLAND AVENUE;

THENCE SOUTHWESTERLY ALONG SAID SOUTHEASTERLY LINE OF SAID PARCEL NO. 1 IN DEED DATED AND RECORDED AFORESAID SOUTH $23^{\circ} 34' 54''$ WEST 167 FEET TO THE POINT OR PLACE OF BEGINNING.



**ATTACHMENT B
INSPECTION FORMS (SITE WIDE, WELLS AND SUB-SLAB DEPRESSURIZATION
SYSTEM)**

Site Inspection Form

Date Performed: 1/2/2020
 Site Name: 1-5 Holland Ave
 Site Location: White Plains, NY

Weather: Cloudy
 Inspector Name: Mark Randazzo
 Inspector Signature: 

Cap/Cover Inpection					
Cap/Cover Type (e.g. gravel, pavement)	Cap/Cover Area (e.g. west lot, building south)	Inspected (Y/N)	Acceptable (Y/N)	Maintenance Required (Y/N)	Description of Required Maintenance or Comments
Concrete	Interior of building	Y	Y	No	No penetrations noted.
Asphalt	West side of building	Y	Y	No	No penetrations noted.
Asphalt	North side of building	Y	Y	No	No penetrations noted.
Gravel	South side of building	Y	Y	No	No penetrations noted.

Conditions to Review

- a. erosion
- b. missing cap/cover material
- c. vegetation growing through cap/cover (excluding vegetated covers)
- d. areas of ponded water
- e. areas of settlement
- f. damage from burrowing animals

Site Fence Inpection			
Inspected (Y/N)	Acceptable (Y/N)	Maintenance Required	Description of Required Maintenance or Comments
Y	Y	No	

Site Inspection Form

Date Performed: 1/3/2020
 Site Name: 1-5 Holland Ave
 Site Location: Westchester, NY

Weather: 45 Degrees Cloudy and Rainy
 Inspector Name: Trevor Tibbrine
 Inspector Signature: *Trevor Tibbrine*

Well Integrity Inspection				
Well ID	Inspected (Y/N)	Acceptable (Y/N)	Maintenance Required (Y/N)	Description of Required Maintenance or Comments
MW-1	Y	Y	Y	Bolts were slightly stripped. The threads were tapped and bolts were tightened to ~75% original tightness.
MW-2	Y	Y	N	Some water in well. Not inundated. Gasket in good shape. Bolts were slightly stripped. Threads were tapped and bolts were tightened to ~50% original tightness.
MW-2SB	Y	Y	N	Some water in well. Not inundated. Gasket in good shape.
MW-2DB	Y	Y	N	Small amount of water below PVC opening. Tightened down well lid.
MW-4S	Y	Y	N	
MW-4D	Y	Y	N	
MW-5	Y	Y	N	One bolt was stripped. The rest were in good condition. Tightened down bolts and lid.
MW-5SB	Y	Y	N	
MW-5DB	Y	Y	N	
MW-6	NA	NA	NA	Well Removed
MW-6SB	NA	NA	NA	Well Removed
MW-7	Y	Y	N	Inundated by water. Tightened down the well lid.
MW-7SB	Y	Y	N	Inundated by water. Tightened down the well lid.
MW-8	Y	Y	N	
MW-8SB	Y	Y	N	
MW-9	Y	Y	N	
MW-9SB	Y	Y	N	Small amount of water below PVC opening. Tightened down the well lid.

Conditions to Review

- a. depth Sounding matches construction
- b. well pad is not broken or falling apart
- c. lock functions properly
- d. well cap is functional and properly preventing water infiltration
- e. well casing or flush mount protective cover is protective the well

VI System Inspection*			
Inspected (Y/N)	Acceptable (Y/N)	Maintenance Required (Y/N)	Description of Required Maintenance or Comments
Y	Y	Y	Fan 2 electrical connection faulty. Issue resolved.

* Complete VI System Field Inspection Form contained in Operation and Maintenance Manual and append.



O'BRIEN & GERE

System Inspection Field Form

STRUCTURE INSPECTION

Routine or Non-Routine (circle one)

Address: 1 HOLLAND AVE

Structure ID #: _____

Performed by: EADate: 1/21/20 + 4/30/20

Have the following items changed since the last visit?

	Yes	No
Building Foot Print	_____	☒
Basement/Slab Occupancy	_____	☒
Heating / Ventilating Systems	_____	☒
Basement Finish	_____	☒
Crawlspaces	_____	☒
Drains, Sumps, Floor Cracks	_____	☒
Wall Penetrations, Cracks	_____	☒
Appliances (in basement)	_____	☒
Siding	_____	☒
Are there any new buildings on the property or conversion of spaces in previously existing building?	_____	☒
Ownership	☒	_____

If Yes, describe in comments section below.

If Yes, write new owner name contact information below

Date of Ownership Change _____

Owner Name

CLUSTER STORAGE

Telephone No.

914 359 3220

If any of these items have changed, a redesign may be required. Contact the maintenance supervisor for field review.

Documentation

Were digital photographs taken of the entire system?

☐ Yes☒ No

Was Property Owner provided "Operational Fact Sheet"?

☐ Yes☒ No☐ No - has already been provided

Was the drawing updated to show any changes?

☐ Yes☐ No☒ N/A

Was a Service Call filed for items that could not be addressed during this visit?

☐ Yes☐ No☒ N/A

Comments

7-11 HOLLAND UNOCCUPIED.

FAN 2 FOUND INOPERABLE ON 1/21/20. FURTHER DIAGNOSIS INDICATED ELECTRICAL POWER WAS DISCONNECTED. ELECTRICAL POWER WAS RESTORED ON 4/30/20 + THE INSPECTION WAS COMPLETED



System Inspection Field Form

FAN AND ELECTRICAL

Routine or Non-Routine (circle one)

Address: 1 Hollow Ave

Structure ID #: _____

Performed by: EADate: 1/21/20 + 4/30/20

Equipment Documentation

Manometer Reading at Fan Inlet (" w.c. vacuum)

Fan #	2A	3A	3B	4A	4B					
Fan Model	HP-220	GP-501	GP-501	HS-3000	GP-501					
Manometer Reading (Prior Commissioned)	-2 1/4	NAL	NAL	-1 3/8	-2 3/8					
Manometer Reading (As Found)	-2 1/4	-4	-3 1/4	-1 3/8	-2 3/8					
Manometer Reading (As Left)	-2 1/4	-4	-3 1/4	-1 3/8	-2 3/8					

Manometer Reading at Sub-Slab SSPs (" w.c. vacuum)

Note: For SSPs located in accessible crawlspaces with EPDM membrane, use the crawlspace field form to record the SSP manometer reading.

SSP #	2A-A	2A-B	3A-A	3A-B	3B-A	3B-B	4B-A	4B-B	4A-A	4A-B	4B-C
Manometer Reading (Prior Commissioned)	-2 3/8	-2 1/4	NAL	-4	NAL	-3 1/4	NAL	NAL	-1 3/8	-1 1/8	NAL
Manometer Reading (As Found)	-2 1/4	-2 1/4	NAL	-4	NAL	-3 1/4	NAL	NAL	-1 1/4	-1 1/8	-2 3/8
Meet Criteria? **	YES	YES	-	YES	-	YES	-	-	YES	YES	-
Manometer Reading (As Left)	-2 1/4	-2 1/4	NAL	-4	NAL	-3 1/4	NAL	NAL	-1 1/4	-1 1/8	-2 3/8

Fan System Inspection

As Found

As Left

Is fan cover still present?	☒ Yes	☐ No	☐ NA	☐ Yes	☐ No	☒ UC
Each fan mounted securely?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Coupling connections secure?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Is excessive noise heard when fan is running?	☐ Yes	☒ No		☐ Yes	☐ No	☒ UC
Switch is locked in the ON position?	☐ Yes	☒ No		☐ Yes	☐ No	☒ UC
Is set point indicated on speed controller?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Has fan been in continuous operation since previous visit?	☐ Yes	☒ No	FAU 2 INOPERABLE	☒ Yes	☐ No	☐ UC
Is the pipe penetration sealed on the structure's exterior?	☒ Yes	☐ No	☐ NA	☐ Yes	☐ No	☒ UC
Is the downspout/PVC junction sufficiently sealed?	☒ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Is conduit penetration sealed on the structure's exterior?	☒ Yes	☐ No	☐ NA	☐ Yes	☐ No	☒ UC
Each fan runs when switch is ON position?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Each fan stops when switch is in OFF position?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Does the condensate line appear to be functioning correctly?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Is each fan below its maximum vacuum?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC

(HP-220 = 2.5" w.c., GP-501 = 4.25" w.c., FR-250 = 2.6" w.c., HS-5000 = 53" w.c.)

If fan vacuum is at maximum, measure velocity at each SSP (record below).

SSP #										
Velocity at SSP (As Found)										
Velocity at SSP (As Left)										
Does the SSP velocity meet criteria (> 1 ft/min)?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC				

Electrical System Inspection

Are all electrical connections secure?	☒ Yes	☐ No	☐ Yes	☐ No	☒ UC	
Each junction box closed?	☒ Yes	☐ No	☐ Yes	☐ No	☒ UC	
Conduit/Wire properly supported?	☒ Yes	☐ No	☐ Yes	☐ No	☒ UC	
Are audible alarm(s) present and working properly?	☒ Yes	☐ No	☐ NA	☐ Yes	☐ No	☒ UC
Are appliances affected by fan operation?	☐ Yes	☒ No		☐ Yes	☐ No	☒ UC

Labeling Inspection

Correct labels applied in proper location? ***	☒ Yes	☐ No	☐ Yes	☐ No	☒ UC
Are labels still legible?	☒ Yes	☐ No	☐ Yes	☐ No	☒ UC
Is SSDS breaker identified in the electrical panel?	☐ Yes	☒ No	☐ Yes	☐ No	☒ UC
Commissioned value written on SSP sticker?	☒ Yes	☐ No	☐ Yes	☐ No	☒ UC

Comments/Corrective Action

NAL Not Accessible

* As Found conditions = before corrective action. [NA = Not Applicable]

* As Left conditions = after corrective action. [UC = Unchanged from As Found conditions]

** Criteria is met if deviation is less than or equal to 0.25" w.c. (for all fans with the exception of the HS-5000). For an HS-5000 fan, criteria is met if deviation is less than or equal to 10% of the prior commissioned value or less than or equal to 0.25" w.c., whichever is greater.

If deviation exceeds criteria (0.25" w.c. or 10% of prior commissioned value, as applicable), conduct communication testing and document on Re-Commissioning Field Form.

*** Correct labels are at least one green label per floor and one white sticker at every suction point.



System Inspection Field Form

PIPING, SLAB AND WALL

Routine or Non-Routine (circle one)

Address: 1 HOLLAND AVE
Performed by: EA

Structure ID #: _____
Date: 1/21/20 + 4/30/20

Piping Check

	As Found			As Left		
System suction point seals are accessible? <u>NOT ALL ARE ACCESSIBLE</u>	☐ Yes	☒ No		☐ Yes	☐ No	☒ UC
System suction points are sealed to the slab? <u>(ACCESSIBLE COVERS)</u>	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Each component is installed?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Piping system is properly supported (6'-horizontal/8'-vertical)	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Excessive noise is heard in piping joints?	☐ Yes	☒ No		☐ Yes	☐ No	☒ UC
Smoke 10% of all pipe joints and/or piping modifications?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Did smoke enter joints? **	☐ Yes	☒ No		☐ Yes	☐ No	☒ UC

Floor Check

Are areas of the slab not visible (e.g. floor covering)?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Are areas of the slab not accessible (e.g. stored items)?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Were drawing-identified slab crack repairs/modifications smoke tested?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Did smoke enter? **	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Are other cracks present that did not draw smoke?	☒ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Are other cracks present that did draw smoke? **	☐ Yes	☒ No	☐ NA	☐ Yes	☐ No	☒ UC
Were newly identified slab cracks indicated on drawing?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Check and clean Dranjer(s)?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Smoke Dranjer(s)?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC

Wall Check

Are areas of the walls not visible (e.g. finished walls)?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Are areas of the walls not accessible (e.g. stored items)?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC
Were drawing-identified wall crack repairs/modifications smoke tested?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Did smoke enter wall crack(s)? **	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Are other wall cracks/penetrations present that did not draw smoke?	☒ Yes	☐ No	☐ NA	☐ Yes	☐ No	☒ UC
Are other wall cracks/penetrations present that did draw smoke? **	☐ Yes	☒ No	☐ NA	☐ Yes	☐ No	☒ UC
Were newly identified wall cracks indicated on drawing?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Is top course of block wall open?	☐ Yes	☒ No	☐ NA	☐ Yes	☐ No	☒ UC
Smoke top course of block wall (open-top block only)?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Did smoke enter top course? **	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Are utility penetrations sealed so they don't draw smoke?	☒ Yes	☐ No		☐ Yes	☐ No	☒ UC

Sump Check

Have any non-approved modifications been made to sump cover?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Is sump cover structurally sound?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Verify integrity of sump cover seal?	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC
Does sealed sump cover draw smoke? **	☐ Yes	☐ No	☒ NA	☐ Yes	☐ No	☒ UC

Exhaust Stack Check

Distance above eave	Commissioned distance: <u>21'</u>	Criteria: ≥ 1 ft
Distance from nearest opening	Commissioned distance: <u>Varying $\geq 10'$</u>	Criteria: ≥ 10 ft
Distance above nearest opening	Commissioned distance: <u>Varying $\geq 2'$</u>	Criteria: ≥ 2 ft
Are vertical exhaust stack supports installed every 8' maximum?	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ UC
Distances from stack exhaust to openings appear to be unchanged?	☒ Yes ☐ No	☐ Yes ☐ No ☒ UC

*** If the existing exhaust stack is modified and/or removed and replaced as part of non-routine system maintenance, complete the "Stack Modification Field Form" and attach

Comments

Notes:

- * As Found conditions = before corrective action. [NA = Not Applicable]
- * As Left conditions = after corrective action. [UC = Unchanged from As Found conditions]
- ** If answered YES to this question, perform corrective action and re-test.



System Inspection Field Form

CRAWLSPACE

Routine or Non-Routine (circle one)

Address: 1 HOLLAND AVE

Structure ID #: _____

Performed by: EA

Date: 1/21/20 + 4/30/20

Inaccessible Crawlspace (Ventilation) ☒ NA

As Found*	Crawlspace 1	Crawlspace 2	Crawlspace 3	Crawlspace 4
SSP#				
Target Velocity (fpm)				
Measured Velocity (fpm)				
Meets Criteria? **				

As Left*	Crawlspace 1	Crawlspace 2	Crawlspace 3	Crawlspace 4
SSP#				
Target Velocity (fpm)				
Measured Velocity (fpm)				
Meets Criteria? **				

Is sampling port to Inaccessible crawl space threaded with a plug? ☐ Yes ☐ No ☐ Yes ☐ No ☐ UC

Accessible Crawlspace (Sub-Membrane Depressurization) ☒ NA

As Found*	Crawlspace 1	Crawlspace 2	Crawlspace 3	Crawlspace 4
SSP#				
Prior Commissioned Manometer reading (" w.c.)				
As found Manometer reading (" w.c.)				

As Left*	Crawlspace 1	Crawlspace 2	Crawlspace 3	Crawlspace 4
SSP#				
Manometer reading (" w.c.)				

Accessible Crawlspace Performance Inspection

	As Found		As Left		
Was each membrane joint smoke tested?	☐ Yes	☐ No	☐ Yes	☐ No	☐ UC
Did smoke enter? ***	☐ Yes	☐ No	☐ Yes	☐ No	☐ UC
Was the membrane perimeter smoke tested?	☐ Yes	☐ No	☐ Yes	☐ No	☐ UC
Did smoke enter? ***	☐ Yes	☐ No	☐ Yes	☐ No	☐ UC
Is the suction point manometer(s) reading $\leq -1/10$ " w.c.?****	☐ Yes	☐ No	☐ Yes	☐ No	☐ UC

Comments

* As Found conditions = before corrective action. [NA = Not Applicable]

* As Left conditions = after corrective action. [UC = Unchanged from As Found conditions]

** Inaccessible Crawlspace Criteria: Measured velocity $\geq 90\%$ of Target Velocity (adjust if $>110\%$ of target velocity)

*** If answered YES to this question, perform corrective action and re-test.

**** If answered NO to this question, adjust valve accordingly and re-check all SSP and fan readings.



ATTACHMENT C
GROUNDWATER SAMPLING REPORT

August 9, 2019

Kiera Thompson

Engineering Geologist
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7014

RE: NYSDEC BCP No. C360115 - Groundwater Monitoring Report
1-5 Holland Avenue, White Plains, New York
FILE: 14206/72276

Dear **Ms. Thompson**:

In accordance with the *Site Management Plan, BCP No. C360115, 1-5 Holland Avenue, White Plains, New York, December 2014* (SMP), the following is the semi-annual Groundwater Monitoring Report for the above referenced Brownfield site.

This report has been organized into the following sections:

- Section 1 - Background
- Section 2 - Field Activities
- Section 3 - Sample Results
- Section 4 - Remedial Action Objectives Assessment

1. BACKGROUND

As detailed in the *Remedial Investigation Report, BCP No. C360115, 1-5 Holland Avenue, White Plains, New York, April 2014*, results of groundwater sampling indicated the presence of tetrachloroethylene (PCE) in on-site monitoring wells in the source area, in on-site monitoring wells at the downgradient/sidegradient property boundary, and in off-site downgradient monitoring wells, at concentrations above the NYS Class GA groundwater standard of 5 µg/L.

The site cleanup goal for groundwater is, to the extent practicable, to meet NYS Class GA standards. The Class GA standards for the Site's Constituents of Concern (COC) are as follows:

- Tetrachloroethene – 5 µg/L
- cis-1,2-Dichloroethene – 5 µg/L
- Trichloroethene – 5 µg/L
- Vinyl chloride – 2 µg/L

As detailed in the *Interim Remedial Measure Construction Completion Report, BCP No. C360115, 1-5 Holland Avenue, White Plains, New York, October 2014* (IRM), groundwater treatment by In-situ Chemical Oxidation (ISCO) was selected to meet this goal. Two ISCO groundwater treatment injection events were conducted as part of the IRM in June 2013 and September 2014.



As detailed in the most recently updated and NYSDEC approved SMP, groundwater samples are to be collected annually. This report presents groundwater data for the sampling event conducted in April 2019, which is the fifth year the SMP has been implemented. As requested in the Periodic Review Report (PRR) for reporting year 2018 and approved by NYSDEC, this event does not include the two upgradient wells (MW-6 and 6SB) on the 7-11 Holland Avenue property decommissioned in December 2018.

The purpose of the groundwater monitoring is to evaluate concentrations of the Site's COC that exceed Class GA standards, primarily PCE and associated degradation products; to assess the extent of concentration rebound following ISCO treatment; and to monitor the continued attenuation of COC.

2. FIELD ACTIVITIES

On April 4, 2019, OBG set passive diffusion bags (PDBs) in on-site (MW-1, -2, -2S, -2D, -4S, -4D, -5, -5SB, -5DB) and off-site (MW-7, -7SB, -8, -8SB, -9, -9SB) groundwater monitoring wells, as depicted on **Figure 1**. PDBs were retrieved on April 26, 2019. Sampling activities were conducted in accordance with the SMP Field Activities Plan. Groundwater sampling logs and a summary of water quality field parameters are presented in **Appendix A**. Groundwater samples were submitted under chain-of-custody to Merit Laboratories, Inc. (Merit), a NYSDOH ELAP certified laboratory, for analysis of volatile organic compounds (VOCs) by USEPA Test Method 8260.

3. SAMPLE RESULTS

Groundwater analytical results for this sampling event and historical sampling events are summarized on **Table 1**. Merit's laboratory analytical report and OBG's *Data Usability Summary Report* (DUSR) for this sampling event are presented in **Appendices B and C**, respectively. These data have been entered into the NYSDEC Environmental Information Management System. A graphical presentation of current and historical groundwater analytical data is presented in **Appendix D**. A summary of groundwater analytical results for this sampling event are as follows:

■ On-site Groundwater Characterization – Source Area

A summary table of PCE concentrations in source area groundwater since the first ISCO event is presented below.

Well No.	6/10/13	11/14/13	1/14/14	7/17/14	10/10/14	5/8/15	10/09/15	5/04/16	10/25/16	5/18/17	10/30/17	5/15/18	4/26/19
MW-4S	1,040	10	21 (BD 21)	890	327	460	730	400	107	158	151	180	24
MW-4D	5,500	332	317	2,000 (BD 1,750)	54 (BD 63)	29 (BD 25)	2490 (BD 840)	1,300 (BD 1,300)	990 (BD 860)	300 (BD 260)	221 (BD 189)	270 (BD 300)	116

Notes: ISCO injection events occurred June 11-14, 2013 and September 9-11, 2014 as noted by hatched areas.

Bold values exceed Class GA standards.

Units = ug/L, ppb, BD = Blind Duplicate

Compared to the prior sampling event, the PCE concentration in MW-4D is within the same order of magnitude and have decreased from 2,490 µg/L to 116 µg/L since 2015. Compared to the prior sampling event, concentrations of PCE in well MW-4S have decreased an order of magnitude from 180 µg/L to 24 µg/L. PCE degradation compounds were not detected in source area wells.

■ On-site Groundwater Characterization – Downgradient/Sidegradient Property Boundary

A summary table of PCE concentrations in groundwater along the downgradient/sidegradient property boundary since the first ISCO event is presented below.

Well No.	06/10/13	11/15/13	01/14/14	07/17/14	10/10/14	5/8/15	10/9/15	5/4/16	10/25/16	5/18/17	10/30/17	05/15/18	4/26/19
MW-1 (Sidegrad)	2	0.39	3	16	3	10	3	1	2	29	2	34	56
MW-2 (Downgrad)	27	6	19	94	158	33	64	55	15	44	83	123	40
MW-2SB (Downgrad)	0.78	0.71	1	0.52	0.48	0.34	0.24	0.36	0.22	<1.0	0.37	0.43	<1.0
MW-2DB (Downgrad)	3	0.42	3	4	4	3	3	3	2	2	4	4	6
MW-5 (Downgrad)	165	5	67	5	4	4	2	2	32	42	7	4	7
MW-5SB (Downgrad)	4	3	3	3	2	2	2	1	2	0.43 J	2	4	7
MW-5DB (Downgrad)	1	0.81	0.95	0.41	0.48	0.55	0.39	0.31	0.25	3	0.34	0.28	<1.0

Notes: ISCO injection events occurred June 11-14, 2013 and September 9-11, 2014 as noted by hatched areas.

Bold values exceed Class GA standards.

J = The concentration was detected at a value below the Reporting Limit (RL) and above the MDL.

Units = µg/L, ppb

The most recent round of groundwater data indicates that groundwater from five out of the seven property boundary wells exceeded the GA groundwater standard for PCE; however, it is noted that three of these wells had exceedances of only 1-2 µg/L. Consistent with the prior round of groundwater sampling, no PCE degradation compounds were detected in these wells above the GA groundwater standard.

■ Downgradient Off-site Groundwater Characterization

A summary table of PCE concentrations in off-site downgradient groundwater since the first ISCO event is presented below.

Well No.	06/10/13	07/17/14	10/10/14	5/7/15	10/9/15	5/4/16	10/25/16	5/18/6/8/17	10/30/17	05/15/18	4/26/19
MW-7	14	57	71	47	32	34	15	32	31	68	54
MW-7SB	6	7	3	1	0.97	0.86	0.59	0.27 J	<1.0	0.32	<1.0
MW-8	1 (BD <0.67)	4	1	2	1	1	1	3	2	1	2
MW-8SB	265	292	3	280	359	240	190	229	271	360	177 (BD 168)
MW-9	0.18	<1.0	0.38	<1.0	0.25	<1.0	0.31	<1.0	0.31	<1.0	<1.0
MW-9SB	0.3	0.34	0.26	0.21	<1.0	<1.0	<1.0	<1.0	<1.0	0.28	<1.0

Notes: ISCO injection events occurred June 11-14, 2013 and September 9-11, 2014 as noted by hatched areas.

Bold values exceed Class GA standards.

J = The concentration was detected at a value below the Reporting Limit (RL) and above the MDL.

Units = µg/L, ppb, BD = Blind Duplicate

Consistent with the previous groundwater sampling event, groundwater from two out of the six downgradient off-site wells exceeded the GA standard for PCE. PCE degradation compounds detected above GA standards included: cis-1,2-dichloroethene at 7 µg/L in MW-7SB; vinyl chloride at 12 µg/L in MW-8; cis-1,2-dichloroethene at 7 (BD 7) µg/L and trichloroethene at 14 (BD 13) µg/L in MW-8SB. The GA standards for vinyl chloride, cis-1,2-dichloroethene, and trichloroethene are 2 µg/L, 5 µg/L, and 5 µg/L, respectively.

4. REMEDIAL ACTION OBJECTIVES ASSESSMENT

As detailed in the *Final Engineering Report*, NYSDEC Site Number: C360115, 1-5 Holland Avenue, White Plains, New York, December 2014, the Remedial Action Objectives (RAOs) for groundwater are as follows:

■ RAOs for Public Health Protection

- » Prevent ingestion of groundwater with COC concentrations exceeding drinking water standards.
- » Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

■ RAOs for Environmental Protection

- » Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- » Prevent the discharge of COCs to surface water.
- » Remove the source of groundwater or surface water COCs.

Based on the groundwater analytical results collected as part of this sampling event and the institutional and engineering controls currently in-place at the site, the remedy is effective for protection of human health and the environment. Institutional and engineering controls currently in-place include:

■ Engineering Controls

- » composite cover system (Cap) to reduce potential contact with contaminated soils; and
- » sub-slab depressurization system to control the potential for vapor intrusion.

■ Institutional Controls

- » implement, maintain and monitor Engineering Control systems;
- » prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and
- » limit the use and development of the Site to Commercial and Industrial uses only.

Should you have any questions or concerns regarding this matter, please feel free to contact me at (781) 883-6432.

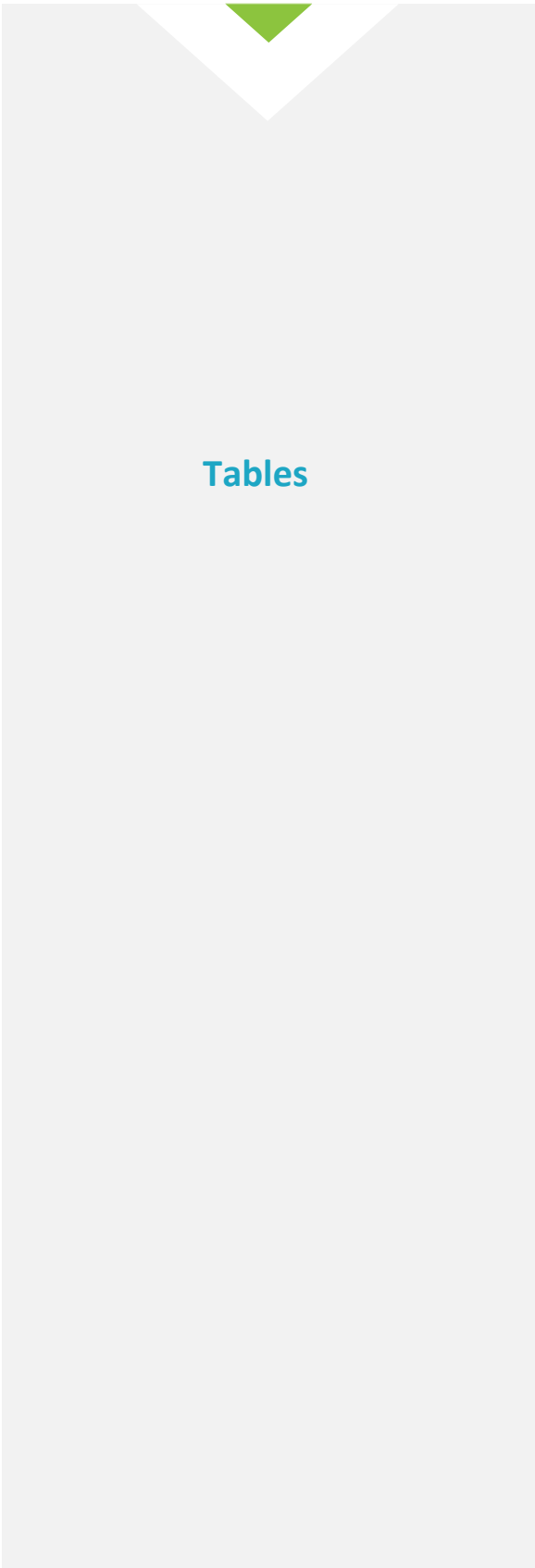
Very truly yours,
O'BRIEN & GERE ENGINEERS, INC.



Mark A. Randazzo, CHMM, CPG, CSP
Project Manager

Appendices: Table 1 – Historical Summary of Groundwater Monitoring Data
Figure 1 – Groundwater Monitoring Well Location Map
Appendix A – Groundwater Sampling Logs
Appendix B – Merit's Laboratory Analytical Report
Appendix C – Data Usability Summary Report
Appendix D - Graphical Presentation of PCE Groundwater Concentrations

cc: Kevin Carpenter, P.E – NYSDEC
Stephanie Selmer – NYSDOH
Karen Puckett – OHAD
Neal Frink, Esq. – The Frink Law Firm, LLC
Douglas Crawford, PE – OBG



Tables

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-2
		Screen Interval (ft above msl):	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	182.7 - 192.7	181.4 - 191.4
		Date Sampled:	10/19/2011	5/1/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards	On-Site Locations														On-Site Locations
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
1,1,2,2-Tetrachloroethane	ug/L	5	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.310
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440
1,1,2-Trichloroethane	ug/L	1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
1,1-Dichloroethane	ug/L	5	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430
1,1-Dichloroethene	ug/L	5	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.710
1,2,3-Trichlorobenzene	ug/L	5	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
1,2,4-Trichlorobenzene	ug/L	5	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.00855
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855
1,2-Dichlorobenzene	ug/L	3	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
1,2-Dichloropropane	ug/L	1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520
1,3-Dichlorobenzene	ug/L	3	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
1,4-Dichlorobenzene	ug/L	3	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330
1,4-Dioxane	ug/L	NC	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	<3	<1	<3	<3	<3	<1	<1	<22.5 R
2-Butanone (MEK)	ug/L	50	<0.630	<0.550	3.4 J	<10	0.79 J	0.63 J	<10	<10	<10	0.43 J	8.3 J	<10	<10	1.30 J	<10
2-Hexanone	ug/L	50	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.260
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.510	<0.350	<0.35	<10	<10	<10	0.37 J	<10	<10	<10	<10	<10	<10	<10	<0.510
Acetone	ug/L	50	<0.870	<0.280	<4.0	1.38 J	4.24 J	2.67 J	<10	1.27 J	<10	2.89 J	18	<10	2.44 J	4.60 J	2.94 J
Benzene	ug/L	1	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430
Bromochloromethane	ug/L	5	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.470
Bromodichloromethane	ug/L	50	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
Bromoform	ug/L	50	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.260
Bromomethane	ug/L	5	<0.510	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.670
Carbon disulfide	ug/L	NC	<0.670	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.27 J	<0.500
Carbon tetrachloride	ug/L	5	<0.500	<0.360		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400
Chlorobenzene	ug/L	5	<0.400	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480
Chloroethane	ug/L	5	<0.480	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.780
Chloroform	ug/L	7	<0.340	<0.220	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.20 J	<0.340
Chloromethane	ug/L	5	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
cis-1,2-Dichloroethene	ug/L	5	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380
cis-1,3-Dichloropropene	ug/L	0.4	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
Cyclohexane	ug/L	NC	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460
Dibromochloromethane	ug/L	50	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360
Dichlorodifluoromethane	ug/L	5	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420
Ethylbenzene	ug/L	5	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340
Isopropylbenzene	ug/L	5	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390
Methyl acetate	ug/L	NC	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380
Methylcyclohexane	ug/L	NC	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	0.29 J	<1	<1	<0.460
Methylene chloride	ug/L	5	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.52 J	<1.98
Styrene	ug/L	5	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330
Tetrachloroethene	ug/L	5	57.9	17.1	2	0.39 J	3	16	3	10	3	1	2	29	2	34	56
Toluene	ug/L	5	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390
trans-1,2-Dichloroethene	ug/L	5	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550
trans-1,3-Dichloropropene	ug/L	0.4	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320
Trichloroethene	ug/L	5	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550
Trichlorofluoromethane	ug/L	5	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.660
Vinyl Chloride	ug/L	2	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460
Xylenes (Total)	ug/L	5	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.630
Total VOCs	ug/L	NA	57.9	17.1	5.4 J	1.77 J	7.24 J	19.3 J	0.37 J	11.27 J	3	4.32 J	26.3	29.3 J	4.44 J	40.37 J	59.46 J

Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Series:
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2DB	MW-2DB
		Screen Interval (ft above msl):	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	181.4 - 191.4	126.3 - 136.3	126.3 - 136.3
		Date Sampled:	5/2/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011	10/20/2011
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards															On-Site Locations	
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350
1,1,2,2-Tetrachloroethane	ug/L	5	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440
1,1,2-Trichloroethane	ug/L	1	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360
1,1-Dichloroethane	ug/L	5	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430
1,1-Dichloroethene	ug/L	5	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710
1,2,3-Trichlorobenzene	ug/L	5	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420
1,2,4-Trichlorobenzene	ug/L	5	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855
1,2-Dichlorobenzene	ug/L	3	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420
1,2-Dichloropropane	ug/L	1	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520
1,3-Dichlorobenzene	ug/L	3	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420
1,4-Dichlorobenzene	ug/L	3	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330
1,4-Dioxane	ug/L	NC	<0.301	<0.97	<5	<5	<5	<5	<3	<1	<3	<3	<3	<1	<1	<1	<20.2 R	<22.5 R
2-Butanone (MEK)	ug/L	50	<0.550	4.7 J	<10	0.69 J	0.56 J	<10	<10	<10	0.34 J	13	<10	<10	1.28 J	<10	<0.510	<0.630
2-Hexanone	ug/L	50	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.350	<0.35	<10	<10	<10	<10	<10	<10	<10	0.15 J	<10	<10	0.16 J	<10	<0.410	<0.510
Acetone	ug/L	50	<0.280	<4.0	0.96 J	1.92 J	3.36 J	<10	1.39 J	<10	2.04 J	11	<10	2.11 J	4.67 J	2.94 J	<0.610	<0.870
Benzene	ug/L	1	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430
Bromochloromethane	ug/L	5	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470
Bromodichloromethane	ug/L	50	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.350
Bromoform	ug/L	50	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260
Bromomethane	ug/L	5	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670
Carbon disulfide	ug/L	NC	<0.300	<0.13	<1	<1	<1	0.18 J	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500
Carbon tetrachloride	ug/L	5	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400
Chlorobenzene	ug/L	5	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480
Chloroethane	ug/L	5	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.780
Chloroform	ug/L	7	<0.220	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.32 J	<1	2.41	<0.340
Chloromethane	ug/L	5	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.350
cis-1,2-Dichloroethene	ug/L	5	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	<0.560	<0.380
cis-1,3-Dichloropropene	ug/L	0.4	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360
Cyclohexane	ug/L	NC	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460
Dibromochloromethane	ug/L	50	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360
Dichlorodifluoromethane	ug/L	5	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420
Ethylbenzene	ug/L	5	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340
Isopropylbenzene	ug/L	5	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390
Methyl acetate	ug/L	NC	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380
Methylcyclohexane	ug/L	NC	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.460
Methylene chloride	ug/L	5	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.48 J	<1.98	<1.98
Styrene	ug/L	5	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330
Tetrachloroethene	ug/L	5	189 D	27	6	19	94	158	33	64	55	15	44	83	123	40	4.83	4.96
Toluene	ug/L	5	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.19	<0.390
trans-1,2-Dichloroethene	ug/L	5	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550
trans-1,3-Dichloropropene	ug/L	0.4	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320
Trichloroethene	ug/L	5	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	<0.440	<0.550
Trichlorofluoromethane	ug/L	5	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660
Vinyl Chloride	ug/L	2	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.460
Xylenes (Total)	ug/L	5	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630
Total VOCs	ug/L	NA	189 D	31.7 J	6.96 J	21.61 J	97.92 J	158.18 J	34.39 J	64	57.38 J	39.45	44.0	85.11 J	129.43 J	43.42 J	8.43	4.96

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2DB	MW-2SB	MW-2SB	
		Screen Interval (ft above msl):	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	126.3 - 136.3	148.9 - 158.9	148.9 - 158.9
		Date Sampled:	5/2/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011	10/21/2011	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards														On-Site Locations			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	
1,1,2,2-Tetrachloroethane	ug/L	5	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	
1,1,2-Trichloroethane	ug/L	1	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	
1,1-Dichloroethane	ug/L	5	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	
1,1-Dichloroethene	ug/L	5	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	
1,2,3-Trichlorobenzene	ug/L	5	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	
1,2,4-Trichlorobenzene	ug/L	5	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	
1,2-Dichlorobenzene	ug/L	3	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	
1,2-Dichloropropane	ug/L	1	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	
1,3-Dichlorobenzene	ug/L	3	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	
1,4-Dichlorobenzene	ug/L	3	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	
1,4-Dioxane	ug/L	NC	<0.301	<0.97	<5	<5	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	<20.2 R	<22.5 R	
2-Butanone (MEK)	ug/L	50	<0.550	3.4 J	<10	1.15 J	0.54 J	<10	<10	<10	<10	12	<10	<10	1.80 J	<10	<0.510	<0.630	
2-Hexanone	ug/L	50	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.350	<0.35	<10	<10	<10	<10	<10	<10	0.15 J	<10	<10	<10	0.29 J	<10	<0.410	<0.510	
Acetone	ug/L	50	<0.280	<4.0	1.23 J	5.22 J	2.07 J	<10	1.30 J	<10	<10	13	<10	<10	2.21 J	2.49 J	3.30 J	<0.610	<0.870
Benzene	ug/L	1	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.510	<0.430	
Bromochloromethane	ug/L	5	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	
Bromodichloromethane	ug/L	50	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.350	
Bromoform	ug/L	50	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	
Bromomethane	ug/L	5	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	
Carbon disulfide	ug/L	NC	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	
Carbon tetrachloride	ug/L	5	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	
Chlorobenzene	ug/L	5	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	
Chloroethane	ug/L	5	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.780	
Chloroform	ug/L	7	<0.220	0.26 J	<1	<1	0.30 J	0.19 J	<1	0.24 J	<1	0.16 J	<1	<1	<1	<1	13	2.69	
Chloromethane	ug/L	5	<0.280	<0.20	<1	<1	<1	0.24 J	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.350	
cis-1,2-Dichloroethene	ug/L	5	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.380	
cis-1,3-Dichloropropene	ug/L	0.4	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	
Cyclohexane	ug/L	NC	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	
Dibromochloromethane	ug/L	50	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	
Dichlorodifluoromethane	ug/L	5	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	
Ethylbenzene	ug/L	5	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	
Isopropylbenzene	ug/L	5	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	
Methyl acetate	ug/L	NC	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.240	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	
Methylcyclohexane	ug/L	NC	<0.360	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	0.22 J	<1	<1	<1	<0.290	<0.460	
Methylene chloride	ug/L	5	<1.98	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.45 J	<1.98	<1.98	
Styrene	ug/L	5	<0.250	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	
Tetrachloroethene	ug/L	5	4.41	3	0.42 J	3	4	4	3	3	3	2	2	4	4	6	0.988 J	0.670 J	
Toluene	ug/L	5	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.390	
trans-1,2-Dichloroethene	ug/L	5	<0.350	<0.58	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	
trans-1,3-Dichloropropene	ug/L	0.4	<0.220	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	
Trichloroethene	ug/L	5	<0.270	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.550	
Trichlorofluoromethane	ug/L	5	<0.450	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	
Vinyl Chloride	ug/L	2	<0.290	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.460	
Xylenes (Total)	ug/L	5	<0.690	<0.24	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	
Total VOCs	ug/L	NA	4.41	6.66 J	1.65 J	9.37 J	6.91 J	4.43 J	4.3 J	3.24 J	3	27.31	2.22 J	6.21 J	8.58 J	9.75 J	13.988 J	3.36 J	

Notes:
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* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-2SB	(DUP) MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-2SB	MW-4D
		Screen Interval (ft above msl):	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	148.9 - 158.9	158 - 168
		Date Sampled:	5/2/2012	5/2/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards													On-Site Locations			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<0.330	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.40
1,1,2,2-Tetrachloroethane	ug/L	5	<0.320	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.60
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.420	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.40
1,1,2-Trichloroethane	ug/L	1	<0.220	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.4
1,1-Dichloroethane	ug/L	5	<0.260	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.80
1,1-Dichloroethene	ug/L	5	<0.410	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.20
1,2,3-Trichlorobenzene	ug/L	5	<0.210	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.0
1,2,4-Trichlorobenzene	ug/L	5	<0.200	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.80
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<13.2
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.00
1,2-Dichlorobenzene	ug/L	3	<0.230	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.80
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.200	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.20
1,2-Dichloropropane	ug/L	1	<0.250	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.20
1,3-Dichlorobenzene	ug/L	3	<0.230	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.20
1,4-Dichlorobenzene	ug/L	3	<0.230	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.60
1,4-Dioxane	ug/L	NC	<0.301	<0.301	<0.97	<5	<5	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	<404
2-Butanone (MEK)	ug/L	50	<0.550	<0.550	4.7 J	<10	<0.52 J	0.64 J	<10	<10	<0.62 J	<10	<12	<10	<10	2.76 J	0.91 J	<10.2
2-Hexanone	ug/L	50	<0.370	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<7.40
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.350	<0.350	<0.35	<10	<10	<10	<10	<10	<10	<10	0.17 J	<10	<10	0.35 J	<10	<8.20
Acetone	ug/L	50	<0.280	<0.280	5.0 J	1.38 J	3.13 J	3.81 J	<10	2.26 J	<10	2.07 J	13	53 J	4.96 J	7.60 J	8.17 J	<12.2
Benzene	ug/L	1	<0.250	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.00
Bromochloromethane	ug/L	5	<0.300	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.2
Bromodichloromethane	ug/L	50	<0.260	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<7.00
Bromoform	ug/L	50	<0.460	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10.4
Bromomethane	ug/L	5	<0.250	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<13.6
Carbon disulfide	ug/L	NC	<0.300	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.60
Carbon tetrachloride	ug/L	5	<0.360	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5.80
Chlorobenzene	ug/L	5	<0.220	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.40
Chloroethane	ug/L	5	<0.360	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.60
Chloroform	ug/L	7	2.5	2.49	1	0.96 J	0.84 J	0.60 J	0.63 J	0.55 J	0.36 J	0.36 J	0.32 J	0.25 J	0.32 J	0.23 J	<1	<8.20
Chloromethane	ug/L	5	<0.280	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	<8.60
cis-1,2-Dichloroethene	ug/L	5	<0.300	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<11.2
cis-1,3-Dichloropropene	ug/L	0.4	<0.250	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<7.20
Cyclohexane	ug/L	NC	<0.380	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4.60
Dibromochloromethane	ug/L	50	<0.240	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.60
Dichlorodifluoromethane	ug/L	5	<0.290	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.40
Ethylbenzene	ug/L	5	<0.220	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.80
Isopropylbenzene	ug/L	5	<0.210	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.00
Methyl acetate	ug/L	NC	<0.220	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<12.0
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.240	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.00
Methylcyclohexane	ug/L	NC	<0.360	<0.360	<0.13	<1	<1	<1	<1	<1	<1	0.24 J	<1	<1	<1	<1	<1	<5.80
Methylene chloride	ug/L	5	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.66 J	<39.6
Styrene	ug/L	5	<0.250	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<7.60
Tetrachloroethene	ug/L	5	<0.330	<0.330	0.78 J	0.71 J	1	0.52 J	0.48 J	0.34 J	0.24 J	0.36 J	0.22 J	<1	0.37 J	0.43 J	0.53 J	2570
Toluene	ug/L	5	<0.270	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	0.13 J	<1	<1	<1	<1	<4.60
trans-1,2-Dichloroethene	ug/L	5	<0.350	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10.0
trans-1,3-Dichloropropene	ug/L	0.4	<0.220	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<9.00
Trichloroethene	ug/L	5	<0.270	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<8.80
Trichlorofluoromethane	ug/L	5	<0.450	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<4.40
Vinyl Chloride	ug/L	2	<0.290	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<6.00
Xylenes (Total)	ug/L	5	<0.690	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<13.2
Total VOCs	ug/L	NA	2.5	2.49	11.48 J	3.05 J	5.59 J	5.57 J	1.11 J	3.15 J	0.60 J	3.03 J	25.99	53.3 J	5.65 J	11.37 J	10.27 J	2,570

Notes:
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BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	DUP (MW-4D)	MW-4D	
		Screen Interval (ft above msl):	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168
		Date Sampled:	10/19/2011	5/1/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards												On-Site Locations					
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<17.5	<16.5	<54	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1,2,2-Tetrachloroethane	ug/L	5	<15.5	<16.0	<53	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<22.0	<21.0	<93	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1,2-Trichloroethane	ug/L	1	<18.0	<11.0	<69	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1-Dichloroethane	ug/L	5	<21.5	<13.0	<29	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,1-Dichloroethene	ug/L	5	<35.5	<20.5	<54	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2,3-Trichlorobenzene	ug/L	5	<21.0	<10.5	<49	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2,4-Trichlorobenzene	ug/L	5	<19.5	<10.0	<49	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.00855	<0.00855	<24	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dichlorobenzene	ug/L	3	<18.0	<11.5	<27	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dichloroethane (EDC)	ug/L	0.6	<21.0	<10.0	<34	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,2-Dichloropropane	ug/L	1	<26.0	<12.5	<36	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,3-Dichlorobenzene	ug/L	3	<21.0	<11.5	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,4-Dichlorobenzene	ug/L	3	<16.5	<11.5	<36	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
1,4-Dioxane	ug/L	NC	<1130 R	<0.301	<0.97	<5	<5	<5	<5	<5	<5	<5	<5	<3	<3	<1	<1	<3	
2-Butanone (MEK)	ug/L	50	<31.5	<27.5	<650	<10	0.78 J	<200	<200	<10	<10	<10	<10	20 J	2.9 J	<1000	<1000	<500	
2-Hexanone	ug/L	50	<13.0	<18.5	<37	<10	<10	<200	<200	<10	<10	<10	<10	<500	<100	<1000	<1000	<500	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<25.5	<17.5	<70	<10	<10	<200	<200	<10	<10	<10	<10	<500	<100	<1000	<1000	<500	
Acetone	ug/L	50	<43.5	<14.0	<800	5.06 J	4.61 J	12 J	<200	<10	<10	1.97 J	2.02 J	<500	<100	<1000	<1000	<500	
Benzene	ug/L	1	<21.5	<12.5	<22	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromochloromethane	ug/L	5	<23.5	<15.0	<72	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromodichloromethane	ug/L	50	<17.5	<13.0	<38	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromoform	ug/L	50	<13.0	<23.0	<70	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Bromomethane	ug/L	5	<33.5	<12.5	<37	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Carbon disulfide	ug/L	NC	<25.0	<15.0	<25	<1	<1	<20	<20	0.35 J	0.19 J	<1	0.28 J	<50	<10	<100	<100	<50	
Carbon tetrachloride	ug/L	5	<20.0	<18.0	<38	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chlorobenzene	ug/L	5	<24.0	<11.0	<31	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chloroethane	ug/L	5	<39.0	<18.0	<43	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chloroform	ug/L	7	<17.0	<11.0	<30	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Chloromethane	ug/L	5	<17.5	<14.0	<39	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
cis-1,2-Dichloroethene	ug/L	5	<19.0	<15.0	<42	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
cis-1,3-Dichloropropene	ug/L	0.4	<18.0	<12.5	<33	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Cyclohexane	ug/L	NC	<23.0	<19.0	<65	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Dibromochloromethane	ug/L	50	<18.0	<12.0	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Dichlorodifluoromethane	ug/L	5	<21.0	<14.5	<110	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Ethylbenzene	ug/L	5	<17.0	<11.0	<20	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Isopropylbenzene	ug/L	5	<19.5	<10.5	<23	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methyl acetate	ug/L	NC	<17.5	<11.0	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<19.0	<12.0	<50	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methylcyclohexane	ug/L	NC	<23.0	<18.0	<26	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Methylene chloride	ug/L	5	<99.0	<99.0	<32	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Styrene	ug/L	5	<16.5	<12.5.0	<25	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Tetrachloroethene	ug/L	5	6070	6140	5500	332	317	2000	1750	54	63	29	25	2490	840	1300	1300	990	
Toluene	ug/L	5	<19.5	<13.5	<33	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
trans-1,2-Dichloroethene	ug/L	5	<27.5	<17.5	<29	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
trans-1,3-Dichloropropene	ug/L	0.4	<16.0	<11.0	<40	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Trichloroethene	ug/L	5	<27.5	<13.5	<58	0.28 J	0.30 J	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Trichlorofluoromethane	ug/L	5	<33.0	<22.5	<57	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Vinyl Chloride	ug/L	2	<23.0	<14.5	<48	<1	<1	<20	<20	<1	<1	<1	<1	<50	<10	<100	<100	<50	
Xylenes (Total)	ug/L	5	<31.5	<34.5	<120	<3	<3	<60	<60	<3	<3	<3	<3	<200	<30	<300	<300	<200	
Total VOCs	ug/L	NA	6,070	6,140	5,500	337.34 J	322.69 J	2,012 J	1,750	54.35 J	63.19 J	30.97 J	27.30 J	2510 J	842.9 J	1,300	1,300	990	

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Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	DUP (MW-4D)	MW-4D	(DUP) MW-4D	MW-4D	(DUP) MW-4D	MW-4D	(DUP) MW-4D	MW-4D	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	DUP (MW-4S)	MW-4S	MW-4S
		Screen Interval (ft above msl):	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	158 - 168	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5
		Date Sampled:	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/19/2011	5/1/2012	6/10/2013	11/14/2013 (Post ISCO)	1/14/2014 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards												On-Site Locations				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.50	<3.30	<14	<1	<1	<1	<10	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.10	<3.20	<13	<1	<1	<1	<10	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.40	<4.20	<23	<1	<1	<1	<10	<1
1,1,2-Trichloroethane	ug/L	1	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.20	<17	<1	<1	<1	<10	<1
1,1-Dichloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.30	<2.60	7.3	<1	<1	<1	<10	<1
1,1-Dichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<7.10	<4.10	<13	<1	<1	<1	<10	<1
1,2,3-Trichlorobenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.10	<12	<1	<1	<1	<10	<1
1,2,4-Trichlorobenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.90	<2.00	<12	<1	<1	<1	<10	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<50	<50	<50	<5	<1	<10	<10	<1	<0.00855	<0.00855	<6.1	<1	<1	<1	<10	<1
1,2-Dichlorobenzene	ug/L	3	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.30	<6.7	<1	<1	<1	<10	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.00	<8.6	<1	<1	<1	<10	<1
1,2-Dichloropropane	ug/L	1	<50	<50	<50	<5	<1	<10	<10	<1	<5.20	<2.50	<9.1	<1	<1	<1	<10	<1
1,3-Dichlorobenzene	ug/L	3	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.30	<10	<1	<1	<1	<10	<1
1,4-Dichlorobenzene	ug/L	3	<50	<50	<50	<5	0.31 J	<10	<10	<1	<3.30	<2.30	<9.0	<1	<1	<1	<10	<1
1,4-Dioxane	ug/L	NC	<3	<3	<3	<1	<1	<1	<1	<1	<225 R	<0.301	<0.97	<5	<5	<5	<5	<5
2-Butanone (MEK)	ug/L	50	<500	<500	<500	1.5 J	<10	<100	<100	<10	<6.30	<5.50	<160	<10	0.71 J	1.00 J	<100	<10
2-Hexanone	ug/L	50	<500	<500	<500	<50	<10	<100	<100	<10	<2.60	<3.70	<9.4	<10	<10	<10	<100	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<500	<500	<500	<50	<10	<100	<100	<10	<5.10	<3.50	<18	<10	<10	<10	<100	<10
Acetone	ug/L	50	<500	<500	<500	4.4 J	3.81 J	28.3 J	30.2 J	3.35 J	<8.70	<2.80	<200	3.71 J	2.65 J	3.06 J	9.3 J	4.6 J
Benzene	ug/L	1	<50	<50	<50	<5	<1	<10	<10	<1	<4.30	<2.50	<5.6	<1	<1	<1	<10	<1
Bromochloromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.70	<3.00	<18	<1	<1	<1	<10	<1
Bromodichloromethane	ug/L	50	<50	<50	<50	<5	<1	<10	<10	<1	<3.50	<2.60	<9.6	<1	<1	<1	<10	<1
Bromoform	ug/L	50	<50	<50	<50	<5	<1	<10	<10	<1	<2.60	<4.60	<18	<1	<1	<1	<10	<1
Bromomethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.10	<2.50	<9.2	<1	<1	<1	<10	<1
Carbon disulfide	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<6.70	<3.00	<6.3	<1	<1	<1	<10	<1
Carbon tetrachloride	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.00	<3.60	<9.4	<1	<1	<1	<10	<1
Chlorobenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.00	<2.20	<7.8	<1	<1	<1	<10	<1
Chloroethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.80	<3.60	<11	<1	<1	<1	<10	<1
Chloroform	ug/L	7	<50	<50	<50	<5	<1	<10	<10	<1	<3.40	<2.20	<7.5	<1	<1	<1	<10	<1
Chloromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	0.40 J	<3.50	<2.80	<9.8	<1	<1	<1	<10	<1
cis-1,2-Dichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.80	<3.00	<11	<1	<1	<1	<10	<1
cis-1,3-Dichloropropene	ug/L	0.4	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.50	<8.4	<1	<1	<1	<10	<1
Cyclohexane	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<4.60	<3.80	<16	<1	<1	<1	<10	<1
Dibromochloromethane	ug/L	50	<50	<50	<50	<5	<1	<10	<10	<1	<3.60	<2.40	<10.0	<1	<1	<1	<10	<1
Dichlorodifluoromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<4.20	<2.90	<29	<1	<1	<1	<10	<1
Ethylbenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.40	<2.20	<5.1	<1	<1	<1	<10	<1
Isopropylbenzene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.90	<2.10	<5.8	<1	<1	<1	<10	<1
Methyl acetate	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<3.50	<2.20	<10	<1	<1	<1	<10	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<3.80	<2.40	<12	<1	<1	<1	<10	<1
Methylcyclohexane	ug/L	NC	<50	<50	<50	<5	<1	<10	<10	<1	<4.60	<3.60	<6.4	<1	<1	<1	<10	<1
Methylene chloride	ug/L	5	<50	<50	<50	<5	<1	<10	<10	0.56 J	<1.98	<19.8	<8.1	<1	<1	<1	<10	<1
Styrene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<3.30	<2.50	<6.4	<1	<1	<1	<10	<1
Tetrachloroethene	ug/L	5	860	300	260	221	189	270	300	116	1410	1020	1040	10	21	21	890	327
Toluene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	0.29 J	<3.90	<2.70	<8.3	<1	<1	<1	<10	<1
trans-1,2-Dichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.50	<3.50	<7.2	<1	<1	<1	<10	<1
trans-1,3-Dichloropropene	ug/L	0.4	<50	<50	<50	<5	<1	<10	<10	<1	<3.20	<2.20	<10	<1	<1	<1	<10	<1
Trichloroethene	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<5.50	<2.70	<15	<1	<1	<1	<10	<1
Trichlorofluoromethane	ug/L	5	<50	<50	<50	<5	<1	<10	<10	<1	<6.60	<4.50	<14	<1	<1	<1	<10	<1
Vinyl Chloride	ug/L	2	<50	<50	<50	<5	<1	<10	<10	<1	<4.60	<2.90	<12	<1	<1	<1	<10	<1
Xylenes (Total)	ug/L	5	<200	<200	<200	<20	<3	<30	<30	<3	<6.30	<6.90	<29	<3	<3	<3	<30	<3
Total VOCs	ug/L	NA	860	300	260	226.9 J	193.12 J	298.3 J	330.2 J	120.6 J	1,410	1,020	1047.3	13.71 J	24.36 J	25.06 J	899.3 J	331.6 J

Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Serie:
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-4S	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	
		Screen Interval (ft above msl):	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	178.4 - 188.5	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/21/2011	5/2/2012	6/10/2013	11/15/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards											On-Site Locations						
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<20	<10	<10	<1	<1	<1	<10	<1	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<20	<10	<10	<1	<1	<1	<10	<1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<20	<10	<10	<1	<1	<1	<10	<1	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	<5	
2-Butanone (MEK)	ug/L	50	<200	3.0 J	<100	9.1 J	<10	<10	<100	<10	<0.630	<0.550	8.0 J	<10	0.42 J	0.84 J	<10	<10	
2-Hexanone	ug/L	50	<200	<100	<100	<10	<10	<10	<100	<10	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<200	<100	<100	0.12 J	<10	<10	<100	<10	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	
Acetone	ug/L	50	<200	<100	<100	11	<10	2.46 J	26.7 J	2.71 J	<0.870	<0.280	<4.0	1.25 J	1.99 J	6.02 J	<10	0.69 J	
Benzene	ug/L	1	<20	<10	<10	<1	<1	<1	<10	<1	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<20	<10	<10	<1	<1	<1	<10	<1	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	
Bromoform	ug/L	50	<20	<10	<10	<1	<1	<1	<10	<1	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	
Bromomethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	
Chloroethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	
Chloroform	ug/L	7	<20	<10	<10	<1	<1	<1	<10	<1	<0.340	<0.220	<0.15	<1	<1	<1	<1	<1	
Chloromethane	ug/L	5	<20	<10	<10	0.16 J	<1	<1	<10	<1	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<20	<10	<10	<1	<1	<1	<10	<1	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<20	<10	<10	<1	<1	<1	<10	<1	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	
Methylene chloride	ug/L	5	<20	<10	<10	<1	<1	<1	<10	0.48	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	
Styrene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	460	730	400	107	158	151	180	24	9.19	3.14	165	5	67	5	4	4	
Toluene	ug/L	5	<20	<10	<10	0.15 J	<1	<1	<10	<1	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<20	<10	<10	<1	<1	<1	<10	<1	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	
Trichloroethene	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<20	<10	<10	<1	<1	<1	<10	<1	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	<20	<10	<10	<1	<1	<1	<10	<1	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<60	<30	<30	<3	<3	<3	<30	<3	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	
Total VOCs	ug/L	NA	460	733 J	400	127.53	158	153.46 J	206.7 J	27.19 J	9.19	3.14	173 J	6.25 J	69.41 J	11.86 J	4	4.69 J	

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	DUP (MW-5DB)	MW-5DB	MW-5DB	MW-5DB
		Screen Interval (ft above msl):	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	179.7 - 189.7	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3
		Date Sampled:	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	5/5/2011	10/21/2011	5/2/2012	6/10/2013	11/15/2013 (Post ISCO)	11/15/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards																
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1
1,4-Dioxane	ug/L	NC	<3	<1	<3	<3	<1	<1	<1	<20.2	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	<5
2-Butanone (MEK)	ug/L	50	<10	0.39 J	ug/L 9.0 J	<10	<10	1.59 J	<10	<0.510	<0.630	<0.550	4.8 J	<10	<10	0.47 J	0.79 J	<10
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	0.14 J	<10	<10	0.26 J	<10	<0.410	<0.510	<0.350	<0.35	<10	<10	<10	<10	0.38 J
Acetone	ug/L	50	<10	2.40 J	9.9 J	<10	2.39 J	4.88 J	3.25 J	<0.610	<0.870	<0.280	<4.0	<10	0.89 J	3.42 J	4.48 J	<10
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1
Chloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1
Chloroform	ug/L	7	<1	<1	ug/L 0.11 J	<1	<1	<1	<1	1.54	0.425 J	<0.220	0.26 J	0.27 J	0.26 J	0.29 J	0.23 J	0.25 J
Chloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.350	<0.280	<0.20	<1	<1	<1	0.44 J	0.52 J
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	<1	0.41 J	<1.98	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	5	2	2	32	42	7	4	7	2.53	2.37	4.08	1	0.81 J	0.75 J	0.95 J	0.41 J	0.48 J
Toluene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	0.504 J	<0.390	<0.270	<0.17	<1	<1	<1	0.30 J	0.25 J
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5	<1	<1	0.13 J	<1	<1	<1	<1	<0.440	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	2	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3
Total VOCs	ug/L	NA	2	4.79 J	51.28	42	9.39 J	10.73 J	10.66 J	4.57 J	2.80 J	4.08	6.06 J	1.08 J	1.9 J	5.13 J	6.65 J	1.88 J

Notes:
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Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5DB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	
		Screen Interval (ft above msl):	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	105.3 - 115.3	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	4/26/2019 (Post ISCO)	5/5/2011	10/25/2011	5/2/2012	6/10/2013	11/15/2013 (Post ISCO)	1/14/2014 (Post ISCO)	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards									On-Site Locations								
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	<0.330	<0.27	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	<0.320	<0.27	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	<0.420	<0.46	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	<0.220	<0.34	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	<0.260	<0.15	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	<0.410	<0.27	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	<0.210	<0.25	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	<0.200	<0.24	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	<0.230	<0.13	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	<0.200	<0.17	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	<0.250	<0.18	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	<0.230	<0.20	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	<0.230	<0.18	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<20.2	<22.5 R	<0.301	<0.97	<5	<5	<5	<5	
2-Butanone (MEK)	ug/L	50	<10	<10	<10	10	<10	<10	1.55 J	<10	<0.510	<0.630	<0.550	<3.3	<10	0.70 J	0.64 J	<10	
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	<0.370	<0.19	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	0.15 J	<10	<10	0.26 J	<10	<0.410	<0.510	<0.350	<0.35	<10	<10	<10	<10	
Acetone	ug/L	50	1.63 J	<10	2.01 J	9.9 J	<10	2.23 J	5.41 J	4.05 J	10.2	<0.870	<0.280	<4.0	0.86 J	3.86 J	4.27 J	<10	
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	<0.250	<0.11	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	<0.300	<0.36	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.350	<0.260	<0.19	<1	<1	<1	<1	
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	<0.460	<0.35	<1	<1	<1	<1	
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	<0.250	<0.18	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	<0.300	<0.13	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	<0.360	<0.19	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	<0.220	<0.16	<1	<1	<1	<1	
Chloroethane	ug/L	5	<1	<1	<1	<1	0.85 J	<1	<1	<1	<0.480	<0.780	<0.360	<0.21	<1	<1	<1	<1	
Chloroform	ug/L	7	0.30 J	0.25 J	0.26 J	0.23 J	0.29 J	0.25 J	0.33 J	0.29 J	4.22	3.12	0.533 J	0.56 J	0.50 J	0.55 J	0.40 J	0.36 J	
Chloromethane	ug/L	5	0.46 J	<1	<1	0.29 J	0.37 J	<1	0.30 J	0.31 J	<0.430	<0.350	<0.280	<0.20	<1	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.380	<0.300	<0.21	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	<0.250	<0.17	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	<0.380	<0.32	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	<0.240	<0.20	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	<0.290	<0.57	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	<0.220	<0.10	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	<0.210	<0.12	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	<0.220	<0.20	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	0.24 J	<1	<1	<1	<1	<1	<0.450	<0.380	<0.240	<0.25	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	0.25 J	<1	<1	<1	<0.290	<0.460	<0.360	<0.13	<1	<1	<1	<1	
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	0.62 J	<1.98	<1.98	<1.98	<0.16	<1	<1	<1	<1	
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	<0.250	<0.13	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	0.55 J	0.39 J	0.31 J	0.25 J	3	0.34 J	0.28 J	0.51 J	37.6	5.67	24.1	4	3	3	3	2	
Toluene	ug/L	5	<1	<1	<1	0.16 J	<1	<1	<1	<1	<0.230	<0.390	<0.270	<0.17	<1	<1	<1	0.33 J	
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<3	<1	<1	<1	<1	<1	<0.500	<0.550	<0.350	<0.14	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	<0.220	<0.20	<1	<1	<1	<1	
Trichloroethene	ug/L	5	<1	<1	<1	<1	1	<1	<1	<1	<0.440	<0.550	<0.270	<0.29	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	<0.450	<0.28	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	0.49 J	0.45 J	<1	0.28 J	0.82 J	0.46 J	0.50 J	0.59 J	<0.300	<0.460	<0.290	<0.24	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<3	<3	0.47 J	<3	<3	<3	<3	<3	<0.660	<0.630	<0.690	<0.58	<3	<3	<3	<3	
Total VOCs	ug/L	NA	3.43	1.09 J	3.29 J	21.26	4.76 J	3.28 J	8.63 J	6.37 J	52.02	8.79	24.6 J	4.56 J	4.36 J	8.11	8.31	2.69 J	

Notes:
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Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-5SB	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
		Screen Interval (ft above msl):	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	145.1 - 155.1	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	8/3/2011	10/18/2011	4/30/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards								On-Site Locations	Off-Site Upgradient Locations						
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.350	<0.330	<0.27	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.280	<0.310	<0.320	<0.27	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.440	<0.420	<0.46	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.570	<0.360	<0.220	<0.34	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.430	<0.260	<0.15	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.710	<0.410	<0.27	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.420	<0.210	<0.25	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.390	<0.200	<0.24	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.660	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.00855	<0.00855	<0.12	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.360	<0.230	<0.13	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.420	<0.200	<0.17	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.520	<0.250	<0.18	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.410	<0.420	<0.230	<0.20	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.330	<0.230	<0.18	<1	<1	<1
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<20.2	<22.5 R	<0.301	<0.97	<5	<5	<3
2-Butanone (MEK)	ug/L	50	<10	<10	<10	13	<10	<10	1.67 J	<10	2.33	<0.630	<0.550	6.2 J	0.83 J	<10	<10
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<0.370	<0.260	<0.370	<0.19	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	0.19 J	<10	<10	0.25 J	<10	<0.410	<0.510	<0.350	<0.35	<10	<10	<10
Acetone	ug/L	50	1.45 J	<10	1.23 J	21	<10	2.49 J	4.97 J	2.91 J	17.7	<0.870	<0.280	<4.0	4.96 J	<10	1.31 J
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.250	<0.430	<0.250	<0.11	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.560	<0.470	<0.300	<0.36	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.550	<0.260	<0.19	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.260	<0.460	<0.35	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.680	<0.670	<0.250	<0.18	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.500	<0.300	<0.13	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.290	<0.400	<0.360	<0.19	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.480	<0.220	<0.16	<1	<1	<1
Chloroethane	ug/L	5	0.35 J	<1	0.43 J	0.41 J	<1	<1	<1	<1	<0.480	<0.780	<0.360	<0.21	<1	<1	<1
Chloroform	ug/L	7	0.38 J	0.32 J	0.26 J	0.24 J	0.31 J	<1	0.21 J	<1	11.1	<0.340	<0.220	<0.15	<1	<1	<1
Chloromethane	ug/L	5	<1	<1	<1	0.15 J	0.47 J	<1	<1	<1	<0.430	<0.350	<0.280	<0.20	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	0.11 J	<1	<1	0.26 J	0.27 J	<0.560	<0.380	<0.300	<0.21	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.360	<0.250	<0.17	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.230	<0.460	<0.380	<0.32	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.360	<0.240	<0.20	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.420	<0.290	<0.57	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.340	<0.220	<0.10	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.300	<0.390	<0.210	<0.12	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.600	<0.350	<0.220	<0.20	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.380	<0.240	<0.25	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	0.22 J	0.20 J	<1	<1	<1	<1	<0.290	<0.460	<0.360	<0.13	<1	<1	<1
Methylene chloride	ug/L	5	0.30 J	<1	<1	<1	<1	<1	<1	0.47 J	<1.98	<1.98	<1.98	<0.16	<1	<1	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.330	<0.250	<0.13	<1	<1	<1
Tetrachloroethene	ug/L	5	2	2	1	2	0.43 J	2	4	7	<0.380	<0.470	<0.330	0.15 J	<1	<1	<1
Toluene	ug/L	5	0.26 J	<1	<1	0.26 J	<1	<1	<1	<1	<0.230	<0.350	<0.270	<0.17	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.550	<0.350	<0.14	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.450	<0.320	<0.220	<0.20	<1	<1	<1
Trichloroethene	ug/L	5	<1	<1	0.35 J	0.70 J	<1	1	2	2	<0.440	<0.350	<0.270	<0.29	<1	<1	<1
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.220	<0.660	<0.450	<0.28	<1	<1	<1
Vinyl Chloride	ug/L	2	0.39 J	0.44 J	0.45 J	0.36 J	0.89 J	0.38 J	0.37 J	0.32 J	<0.300	<0.460	<0.290	<0.24	<1	<1	<1
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<3	<3	<0.660	<0.630	<0.690	<0.58	<3	<3	<3
Total VOCs	ug/L	NA	5.13 J	2.76 J	3.94 J		1.21 J	5.87 J	13.73 J	12.97 J	31.1	---	---	6.35 J	5.79 J	---	1.31 J

Notes:
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J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-6	MW-6	MW-6	MW-6	MW-6
		Screen Interval (ft above msl):	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6	179.6 - 189.6
		Date Sampled:	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards					
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units						
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.02	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1
1,4-Dioxane	ug/L	NC	<1	<3	<3	<1	<1
2-Butanone (MEK)	ug/L	50	<10	<10	<10	<10	1.37 J
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	<10	0.22 J
Acetone	ug/L	50	0.99 J	45	<10	2.24 J	5.35 J
Benzene	ug/L	1	<1	<1	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1
Chloroethane	ug/L	5	<1	<1	<1	<1	<1
Chloroform	ug/L	7	<1	<1	<1	<1	<1
Chloromethane	ug/L	5	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	5	<1	<1	<1	<1	<1
Toluene	ug/L	5	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1
Trichloroethene	ug/L	5	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1
Vinyl Chloride	ug/L	2	<1	<1	<1	<1	<1
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3
Total VOCs	ug/L	NA	0.99 J	45	---	2.24 J	6.94 J

Notes:
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above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-65B ¹	MW-65B	DUP (MW-65B)	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-65B	MW-7	MW-7	
		Screen Interval (ft above msl):	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	151.9 - 161.9	174.7 - 184.7	174.7 - 184.7
		Date Sampled:	8/3/2011	10/18/2011	10/18/2011	4/30/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	5/4/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	10/18/2011	5/1/2012	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards	Off-Site Upgradient Locations														Off-Site Downgradient Locations	Off-Site Downgradient Locations	
VOLATILE ORGANIC COMPOUNDS (VOCs)		Units																	
1,1,1-Trichloroethane	ug/L	5	<0.420	<0.350	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.330	
1,1,2,2-Tetrachloroethane	ug/L	5	<0.280	<0.310	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.310	<0.320	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.320	<0.440	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.420	
1,1,2-Trichloroethane	ug/L	1	<0.570	<0.360	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.220	
1,1-Dichloroethane	ug/L	5	<0.440	<0.430	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.260	
1,1-Dichloroethene	ug/L	5	<0.410	<0.710	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.710	<0.410	
1,2,3-Trichlorobenzene	ug/L	5	<0.550	<0.420	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.210	
1,2,4-Trichlorobenzene	ug/L	5	<0.340	<0.390	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.200	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.660	<0.00855	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.400	<0.00855	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	
1,2-Dichlorobenzene	ug/L	3	<0.340	<0.360	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.230	
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.460	<0.420	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.200	
1,2-Dichloropropane	ug/L	1	<0.460	<0.520	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.250	
1,3-Dichlorobenzene	ug/L	3	<0.410	<0.420	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.230	
1,4-Dichlorobenzene	ug/L	3	<0.430	<0.330	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.230	
1,4-Dioxane	ug/L	NC	<20.2	<22.5 R	<22.5 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<3	<1	<1	<22.5 R	<0.301	
2-Butanone (MEK)	ug/L	50	<0.510	<0.630	<0.630	<0.550	6.4 J	0.88 J	<10	<10	<10	<10	12	<10	<10	<10	1.43 J	<0.550	
2-Hexanone	ug/L	50	<0.370	<0.260	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.260	<0.370	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.410	<0.510	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	0.15 J	<10	<10	<10	<0.510	<0.350	
Acetone	ug/L	50	1.37	<0.870	<0.870	<0.280	<4.0	5.39 J	<10	<10	1.50 J	<10	1.68 J	13	<10	2.62 J	5.13 J	<0.870	<0.280
Benzene	ug/L	1	<0.250	<0.430	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.250	
Bromochloromethane	ug/L	5	<0.560	<0.470	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.470	<0.300	
Bromodichloromethane	ug/L	50	0.767 J	<0.350	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.260	
Bromoform	ug/L	50	<0.520	<0.260	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.260	<0.460	
Bromomethane	ug/L	5	<0.680	<0.670	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.670	<0.250	
Carbon disulfide	ug/L	NC	<0.330	<0.500	<0.500	<0.300	<0.13	<1	<1	<1	<1	0.32 J	<1	<1	<1	<1	<0.500	<0.300	
Carbon tetrachloride	ug/L	5	<0.290	<0.400	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.360	
Chlorobenzene	ug/L	5	<0.420	<0.480	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.220	
Chloroethane	ug/L	5	<0.480	<0.780	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.780	<0.360	
Chloroform	ug/L	7	7.28	<0.340	<0.340	<0.220	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	
Chloromethane	ug/L	5	<0.430	<0.350	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	0.70 J	<1	<0.350	<0.280	
cis-1,2-Dichloroethene	ug/L	5	<0.560	<0.380	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.300	
cis-1,3-Dichloropropene	ug/L	0.4	<0.360	<0.360	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.250	
Cyclohexane	ug/L	NC	<0.230	<0.460	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.380	
Dibromochloromethane	ug/L	50	<0.430	<0.360	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.240	
Dichlorodifluoromethane	ug/L	5	<0.420	<0.420	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.290	
Ethylbenzene	ug/L	5	<0.340	<0.340	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	
Isopropylbenzene	ug/L	5	<0.300	<0.390	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.210	
Methyl acetate	ug/L	NC	<0.600	<0.350	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.220	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.450	<0.380	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.240	
Methylcyclohexane	ug/L	NC	<0.290	<0.460	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.360	
Methylene chloride	ug/L	5	<1.98	<1.98	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.98	<1.98	
Styrene	ug/L	5	<0.380	<0.330	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.250	
Tetrachloroethene	ug/L	5	<0.380	<0.470	<0.470	<0.330	0.16 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	26.2	9.53	
Toluene	ug/L	5	<0.230	<0.390	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.270	
trans-1,2-Dichloroethene	ug/L	5	<0.500	<0.550	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.350	
trans-1,3-Dichloropropene	ug/L	0.4	<0.450	<0.320	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.220	
Trichloroethene	ug/L	5	<0.440	<0.550	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.270	
Trichlorofluoromethane	ug/L	5	<0.220	<0.660	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.660	<0.450	
Vinyl Chloride	ug/L	2	<0.300	<0.460	<0.460	<0.290	<0.24	<1											

Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Serie
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB
		Screen Interval (ft above msl):	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	174.7 - 184.7	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8
		Date Sampled:	6/11/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/19/2011	5/2/2012	6/11/2013	7/17/2014 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards	On-Site Locations													Off-Site Downgradient Locations	
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.330	<0.10	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<0.067	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.310	<0.320	<0.067	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.420	<0.15	<1
1,1,2-Trichloroethane	ug/L	1	<0.039	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.220	<0.039	<1
1,1-Dichloroethane	ug/L	5	<0.041	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.260	<0.041	<1
1,1-Dichloroethene	ug/L	5	<0.055	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.710	<0.410	<0.055	<1
1,2,3-Trichlorobenzene	ug/L	5	<0.030	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.210	0.040 J	<1
1,2,4-Trichlorobenzene	ug/L	5	0.020 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.200	0.040 J	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<0.045	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	<0.045	<1
1,2-Dichlorobenzene	ug/L	3	<0.053	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.230	<0.053	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<0.039	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.200	<0.039	<1
1,2-Dichloropropane	ug/L	1	<0.045	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.250	<0.045	<1
1,3-Dichlorobenzene	ug/L	3	<0.027	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.230	<0.027	<1
1,4-Dichlorobenzene	ug/L	3	<0.036	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.230	<0.036	<1
1,4-Dioxane	ug/L	NC	<0.97	<5	<5	<5	<3	<1	<3	<1	<1	<1	<1	<22.5 R	<0.301	<0.97	<5
2-Butanone (MEK)	ug/L	50	4.3 J	0.79 J	<10	<10	<10	<10	11	<10	<10	1.70 J	<10	<0.630	<0.550	4.6 J	0.65 J
2-Hexanone	ug/L	50	<0.30	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<0.260	<0.370	<0.30	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<0.14	<10	<10	<10	<10	<10	0.14 J	<10	<10	0.32 J	<10	<0.510	<0.350	<0.14	<10
Acetone	ug/L	50	<3.0	5.40 J	<10	1.57 J	<10	1.79 J	13	<10	2.14 J	6.22 J	3.35 J	<0.870	<0.280	<3.0	5.50 J
Benzene	ug/L	1	<0.014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.250	0.030 J	<1
Bromochloromethane	ug/L	5	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.470	<0.300	<0.13	<1
Bromodichloromethane	ug/L	50	<0.025	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.260	<0.025	<1
Bromoform	ug/L	50	<0.035	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.260	<0.460	<0.035	<1
Bromomethane	ug/L	5	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.510	<0.250	<0.13	<1
Carbon disulfide	ug/L	NC	<0.028	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.670	<0.300	<0.028	<1
Carbon tetrachloride	ug/L	5	<0.025	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.360	<0.025	<1
Chlorobenzene	ug/L	5	<0.032	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.220	<0.032	<1
Chloroethane	ug/L	5	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.360	<0.11	<1
Chloroform	ug/L	7	0.080 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.635 J	0.868 J	0.810 J	0.92 J
Chloromethane	ug/L	5	<0.072	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.280	<0.072	<1
cis-1,2-Dichloroethene	ug/L	5	<0.045	<1	0.22 J	<1	<1	<1	<1	0.26 J	<1	<1	<1	1.03	<0.300	<0.045	<1
cis-1,3-Dichloropropene	ug/L	0.4	<0.019	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.250	<0.019	<1
Cyclohexane	ug/L	NC	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.380	<0.11	<1
Dibromochloromethane	ug/L	50	<0.031	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.240	<0.031	<1
Dichlorodifluoromethane	ug/L	5	<0.058	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.290	<0.058	<1
Ethylbenzene	ug/L	5	<0.011	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	<0.011	<1
Isopropylbenzene	ug/L	5	<0.014	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.210	<0.014	<1
Methyl acetate	ug/L	NC	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.220	<0.15	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<0.039	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.240	<0.039	<1
Methylcyclohexane	ug/L	NC	<0.070	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.360	<0.070	<1
Methylene chloride	ug/L	5	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.98	<1.98	<0.10	<1
Styrene	ug/L	5	<0.016	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.250	<0.016	<1
Tetrachloroethene	ug/L	5	14	57	71	47	32	34	15	32	31	68	54	24.7	16	6	7
Toluene	ug/L	5	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.270	<0.17	<1
trans-1,2-Dichloroethene	ug/L	5	<0.072	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.350	<0.072	<1
trans-1,3-Dichloropropene	ug/L	0.4	<0.027	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.220	<0.027	<1
Trichloroethene	ug/L	5	<0.10	<1	<1	0.28 J	<1	<1	<1	0.30 J	<1	0.27 J	<1	6.71	2.81	3	4
Trichlorofluoromethane	ug/L	5	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.660	<0.450	<0.13	<1
Vinyl Chloride	ug/L	2	<0.066	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.290	<0.066	<1
Xylenes (Total)	ug/L	5	<0.041	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.630	<0.690	<0.041	<3
Total VOCs	ug/L	NA	14	63.19 J	71.22 J	48.85 J	32	35.79 J	39.14	32.26 J	33.14 J	76.51 J	57.35 J	33.1 J	19.7 J	6	18.07 J

Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Serie
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-7SB	MW-8	MW-8	MW-8	DUP (MW-8)	MW-8	MW-8	MW-8	MW-8
		Screen Interval (ft above msl):	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	145.8 - 155.8	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3
		Date Sampled:	5/8/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/20/2011	4/30/2012	6/10/2013	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards													Off-Site Downgradient Locations			
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																	
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.330	<0.27	<1.4	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.310	<0.320	<0.27	<1.3	<1	<1	<1	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.440	<0.420	<0.46	<2.3	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.220	<0.34	7	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.260	<0.15	<0.73	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.710	<0.410	<0.27	<1.3	<1	<1	<1	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.210	<0.25	<1.2	<1	<1	<1	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.200	<0.24	<1.2	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.0080	<0.05	<0.05	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	<0.12	<0.61	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.230	<0.13	<0.67	<1	<1	<1	<1
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.200	<0.17	<0.86	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.520	<0.250	<0.18	<0.91	<1	<1	<1	<1
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.230	<0.20	<1.0	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.230	<0.18	<0.90	<1	<1	<1	<1
1,4-Dioxane	ug/L	NC	<5	<3	<1	<3	<3	<1	<1	<1	<22.5 R	<0.301	<0.97	<0.97	<5	<5	<5	<3
2-Butanone (MEK)	ug/L	50	<10	<10	0.56 J	13	<10	<10	1.57 J	<10	<0.630	<0.550	6.3 J	<16	0.75 J	<10	<10	<10
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<10	<10	<0.260	<0.370	<0.19	<0.94	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<10	<10	0.18 J	<10	<10	0.28 J	<10	<0.510	<0.350	<0.35	<1.8	<10	<10	<10	<10
Acetone	ug/L	50	1.43 J	<10	3.06 J	17	<10	2.21 J	3.55 J	2.35 J	<0.870	<0.280	<4.0	<20	5.26 J	<10	1.53 J	<10
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<0.430	<0.250	<0.11	<0.56	<1	<1	<1	<1
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.470	<0.300	<0.36	<1.8	<1	<1	<1	<1
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.260	<0.19	<0.96	<1	<1	<1	<1
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.260	<0.460	<0.35	<1.8	<1	<1	<1	<1
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.510	<0.250	<0.18	<0.92	<1	<1	<1	<1
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.670	<0.300	<0.13	<0.63	<1	<1	<1	<1
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.500	<0.360	<0.19	<0.94	<1	<1	<1	<1
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.400	<0.220	<0.16	<0.78	<1	<1	<1	<1
Chloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.480	<0.360	<0.21	<1.1	<1	<1	<1	<1
Chloroform	ug/L	7	0.22 J	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	<0.15	<0.75	<1	<1	<1	<1
Chloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.280	<0.20	<0.98	<1	<1	<1	<1
cis-1,2-Dichloroethene	ug/L	5	<1	0.29 J	<1	0.15 J	1	2	4	7	2.21	8.56	5	4.8 J	2	5	2	5
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.250	<0.17	<0.84	<1	<1	<1	<1
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.380	<0.32	<1.6	<1	<1	<1	<1
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<1	<1	<0.360	<0.240	<0.20	<1.00	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.420	<0.290	<0.57	<2.9	<1	<1	<1	<1
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.340	<0.220	<0.10	<0.51	<1	<1	<1	<1
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.210	<0.12	<0.58	<1	<1	<1	<1
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.350	<0.220	<0.20	<1.0	<1	<1	<1	<1
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.380	<0.240	<0.25	<1.2	<1	<1	<1	<1
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<1	<1	<0.460	<0.360	<0.13	<0.64	<1	<1	<1	<1
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	<1	<1	0.47 J	<1.98	<1.98	<0.16	<0.81	<1	<1	0.36 J	<1
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.330	<0.250	<0.13	<0.64	<1	<1	<1	<1
Tetrachloroethene	ug/L	5	1	0.97 J	0.86 J	0.59 J	0.27 J	<1	0.32 J	0.27 J	21.3	26.3	1	<0.67	4	1	2	1
Toluene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.390	<0.270	<0.17	<0.83	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.550	<0.350	0.26 J	<0.72	0.22 J	0.31 J	0.26 J	0.30 J
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<1	<1	<0.320	<0.220	<0.20	<1.0	<1	<1	<1	<1
Trichloroethene	ug/L	5	2	2	0.62 J	0.89 J	1	2	1	0.35 J	0.598 J	<0.270	0.38 J	9	0.42 J	0.35 J	0.26 J	0.49 J
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1	<0.660	<0.450	<0.28	<1.4	<1	<1	<1	<1
Vinyl Chloride	ug/L	2	<1	<1	<1	<1	<1	<1	<1	<1	2.67	3.34	<0.24	<1.2	16	14	17	12
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<3	<3	<0.630	<0.690	<0.58	<2.9	<3	<3	<3	<3
Total VOCs	ug/L	NA	4.65 J	3.26 J	5.1 J	31.81	1.27 J	6.21 J	10.72 J	10.44 J	26.8 J	39.5	5	20.8 J	28.65 J	20.66 J	23.41 J	18.79 J

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	MW-8SB	
		Screen Interval (ft above msl):	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	172.3 - 182.3	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7
		Date Sampled:	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	6/8/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	10/20/2011	4/30/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	6/8/2017 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards													Off-Site Downgradient Locations				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.700	<0.330	<1.4	<5	<1	<10	<5	<10	<20	<1
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.620	<0.320	<1.3	<5	<1	<10	<5	<10	<20	<1
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.880	<0.420	<2.3	<5	<1	<10	<5	<10	<20	<1
1,1,2-Trichloroethane	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<0.720	<0.220	<1.7	<5	<1	<10	<5	<10	<20	<1
1,1-Dichloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.860	<0.260	<0.73	<5	<1	<10	<5	<10	<20	<1
1,1-Dichloroethene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<1.42	<0.410	<1.3	<5	<1	<10	<5	<10	<20	<1
1,2,3-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.840	<0.210	<1.2	<5	<1	<10	<5	<10	<20	<1
1,2,4-Trichlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<1	<0.780	<0.200	<1.2	<5	<1	<10	<5	<10	<20	<1
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<1	<1	<1	<1	<1	<0.00855	<0.00855	<0.61	<5	<1	<10	<5	<10	<20	<1	
1,2-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<0.720	<0.230	<0.67	<5	<1	<10	<5	<10	<20	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<1	<1	<1	<1	<1	<0.840	<0.200	<0.86	<5	<1	<10	<5	<10	<20	<1	
1,2-Dichloropropane	ug/L	1	<1	<1	<1	<1	<1	<1	<1.04	<0.250	<0.91	<5	<1	<10	<5	<10	<20	<1	
1,3-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<0.840	<0.230	<1.0	<5	<1	<10	<5	<10	<20	<1	
1,4-Dichlorobenzene	ug/L	3	<1	<1	<1	<1	<1	<1	<0.660	<0.230	<0.90	<5	<1	<10	<5	<10	<20	<1	
1,4-Dioxane	ug/L	NC	<1	<3	<1	<1	<1	<1	<45.1 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<1	
2-Butanone (MEK)	ug/L	50	<10	12	<10	<10	1.68 J	<10	<1.26	<0.550	<16	<50	<10	<100	1.7 J	<100	<200	<10	
2-Hexanone	ug/L	50	<10	<10	<10	<10	<10	<10	<0.520	<0.370	<0.94	<50	<10	<100	<50	<100	<200	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	0.13 J	<10	<10	0.22 J	<10	<1.02	<0.350	<1.8	<50	<10	<100	<50	<100	<200	<10	
Acetone	ug/L	50	1.2 J	13	<10	2.21 J	5.34 J	4.18 J	<1.74	<0.280	<20	6.9 J	<10	<100	<50	<100	<200	<10	
Benzene	ug/L	1	<1	<1	<1	<1	<1	<1	<0.860	<0.250	<0.56	<5	<1	<10	<5	<10	<20	<1	
Bromochloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<0.940	<0.300	<1.8	<5	<1	<10	<5	<10	<20	<1	
Bromodichloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<0.700	<0.260	<0.96	<5	<1	<10	<5	<10	<20	<1	
Bromoform	ug/L	50	<1	<1	<1	<1	<1	<1	<0.520	<0.460	<1.8	<5	<1	<10	<5	<10	<20	<1	
Bromomethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1.34	<0.250	<0.92	<5	<1	<10	<5	<10	<20	<1	
Carbon disulfide	ug/L	NC	<1	<1	<1	<1	<1	<1	<1.00	<0.300	<0.63	<5	<1	<10	<5	<10	<20	<1	
Carbon tetrachloride	ug/L	5	<1	<1	<1	<1	<1	<1	<0.800	<0.360	<0.94	<5	<1	<10	<5	<10	<20	<1	
Chlorobenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.960	<0.220	<0.78	<5	<1	<10	<5	<10	<20	<1	
Chloroethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1.56	<0.360	<1.1	<5	<1	<10	<5	<10	<20	<1	
Chloroform	ug/L	7	<1	<1	<1	<1	<1	<1	2.23	<0.220	<0.75	<5	5	<10	<5	<10	<20	<1	
Chloromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<0.700	<0.280	<0.98	<5	<1	<10	<5	<10	<20	<1	
cis-1,2-Dichloroethene	ug/L	5	2	5	4	4	2	2	7.32	3.98	4.4 J	9	<1	10	10	8.3 J	9.6 J	9	
cis-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<0.720	<0.250	<0.84	<5	<1	<10	<5	<10	<20	<1	
Cyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.920	<0.380	<1.6	<5	<1	<10	<5	<10	<20	<1	
Dibromochloromethane	ug/L	50	<1	<1	<1	<1	<1	<1	<0.720	<0.240	<1.00	<5	<1	<10	<5	<10	<20	<1	
Dichlorodifluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<0.840	<0.290	<2.9	<5	<1	<10	<5	<10	<20	<1	
Ethylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.680	<0.220	<0.51	<5	<1	<10	<5	<10	<20	<1	
Isopropylbenzene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.780	<0.210	<0.58	<5	<1	<10	<5	<10	<20	<1	
Methyl acetate	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.700	<0.220	<1.0	<5	<1	<10	<5	<10	<20	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.760	<0.240	<1.2	<5	<1	<10	<5	<10	<20	<1	
Methylcyclohexane	ug/L	NC	<1	<1	<1	<1	<1	<1	<0.920	<0.360	<0.64	<5	<1	<10	<5	<10	<20	0.21 J	
Methylene chloride	ug/L	5	<1	<1	<1	<1	<1	0.35 J	<3.96	<1.98	<0.81	<5	<1	<10	<5	<10	<20	<1	
Styrene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.660	<0.250	<0.64	<5	<1	<10	<5	<10	<20	<1	
Tetrachloroethene	ug/L	5	1	1	3	2	1	2	250	217 D	265	292	3	280	359	240	190	229	
Toluene	ug/L	5	<1	<1	<1	<1	<1	<1	<0.780	<0.270	<0.83	<5	<1	<10	<5	<10	<20	<1	
trans-1,2-Dichloroethene	ug/L	5	0.20 J	0.27 J	0.33 J	0.24 J	0.20 J	0.24 J	<1.10	<0.350	<0.72	<5	<1	<10	<5	<10	<20	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<1	<1	<1	<1	<1	<1	<0.640	<0.220	<1.0	<5	<1	<10	<5	<10	<20	<1	
Trichloroethene	ug/L	5	0.24 J	0.50 J	0.59 J	0.50 J	<1	0.27 J	8.99	9.22	10	12	<1	10	14	10	14.2 J	14	
Trichlorofluoromethane	ug/L	5	<1	<1	<1	<1	<1	<1	<1.32	<0.450	<1.4	<5	<1	<10	<5	<10	<20	<1	
Vinyl Chloride	ug/L	2	20	8	19	13	12	12	<0.920	<0.290	<1.2	<5	<1	<10	<5	<10	<20	<1	
Xylenes (Total)	ug/L	5	<3	<3	<3	<3	<3	<3	<1.26	<0.690	<2.9	<20	<3	<30	<20	<30	<60	<3	
Total VOCs	ug/L	NA	24.64 J	39.9	7.00 J	21.95 J	22.44 J	21.04 J	269	230	275	319.9 J	8	300	384.7 J	258.3 J	213.8	238 J	

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

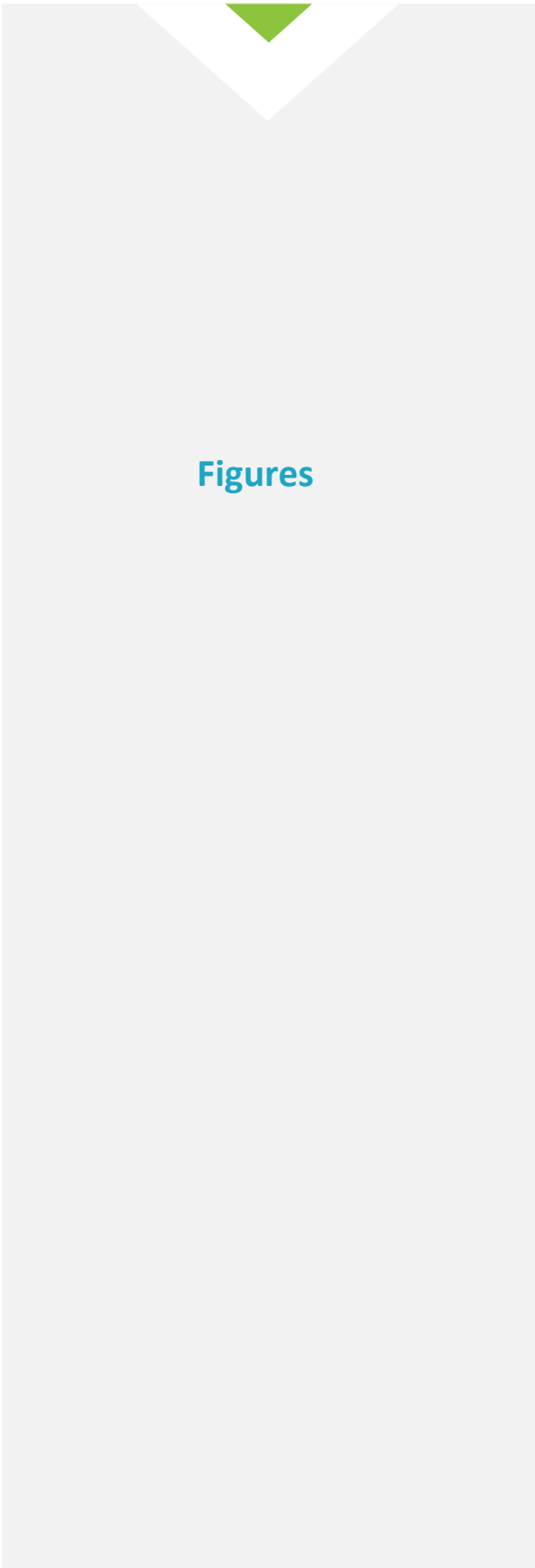
Parameter		Well ID:	MW-8SB	MW-8SB	MW-8SB	DUP (MW-8SB)	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	
		Screen Interval (ft above msl):	141.7 - 151.7	141.7 - 151.7	141.7 - 151.7	172.3 - 182.3	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8	175.8 - 185.8
		Date Sampled:	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	04/26/2019 (Post ISCO)	10/20/2011	5/1/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards												Off-Site Downgradient Locations					
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																		
1,1,1-Trichloroethane	ug/L	5	<5	<10	<1	<1	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<5	<10	<1	<1	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<5	<10	<1	<1	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<5	<10	<1	<1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<5	<10	<1	<1	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<5	<10	<1	<1	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<5	<10	<1	<1	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<5	<10	<1	<1	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.05	<0.05	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<5	<10	<1	<1	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<5	<10	<1	<1	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<5	<10	<1	<1	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<5	<10	<1	<1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<5	<10	<1	<1	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<5	<10	<1	<1	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<1	<1	<1	<1	<22.5 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<3	<1	<1	
2-Butanone (MEK)	ug/L	50	<50	<100	<10	<10	<0.630	<0.550	3.7 J	1.09 J	<10	<10	<10	<10	<10	<10	<10	1.96 J	
2-Hexanone	ug/L	50	<50	<100	<10	<10	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<50	<100	<10	<10	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	<10	<10	<10	0.41 J	
Acetone	ug/L	50	<50	23.7 J	1.94 J	3.38 J	<0.870	<0.280	<4.0	5.10 J	<10	1.60 J	<10	2.63 J	41	<10	2.01 J	6.13 J	
Benzene	ug/L	1	<5	<10	<1	<1	<0.430	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<5	<10	<1	<1	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<5	<10	<1	<1	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	ug/L	50	<5	<10	<1	<1	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromomethane	ug/L	5	<5	<10	<1	<1	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<5	<10	<1	<1	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<5	<10	<1	<1	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<5	<10	<1	<1	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	ug/L	5	<5	<10	<1	<1	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	ug/L	7	<5	<10	<1	<1	9.28	<0.220	<0.15	<1	<1	<1	<1	<1	0.11 J	<1	<1	0.32 J	
Chloromethane	ug/L	5	<5	<10	<1	<1	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	8	10	7	7	<0.380	<0.300	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<5	<10	<1	<1	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<5	<10	<1	<1	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<5	<10	<1	<1	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<5	<10	<1	<1	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<5	<10	<1	<1	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<5	<10	<1	<1	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<5	<10	<1	<1	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<5	<10	<1	<1	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<5	<10	<1	<1	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylene chloride	ug/L	5	<5	<10	0.31 J	0.30 J	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Styrene	ug/L	5	<5	<10	<1	<1	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	271	360	177	168	<0.470	<0.330	0.18 J	<1	0.38 J	<1	0.25 J	<1	0.31 J	<1	0.31 J	<1	
Toluene	ug/L	5	<5	<10	<1	<1	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	ug/L	5	<5	<10	<1	<1	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<5	<10	<1	<1	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	ug/L	5	14	20	14	13	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<5	<10	<1	<1	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	<5	<10	<1	<1	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<20	<30	<3	<3	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Total VOCs	ug/L	NA	293	413.7 J	200.25 J	191.68 J	9.28	---	---	6.19 J	0.38 J	1.60 J	0.25 J	2.63 J	41.42	---	2.32 J	8.82 J	

Notes:
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Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
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BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria

Table 1
Groundwater Quality VOC Summary
Groundwater Sampling Report
Brownfield Cleanup Program NO. C360115

Parameter		Well ID:	MW-9	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	MW-9SB	
		Screen Interval (ft above msl):	175.8 - 185.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8	144.8 - 155.8
		Date Sampled:	04/26/2019 (Post ISCO)	10/20/2011	5/2/2012	6/10/2013	7/17/2014 (Post ISCO)	10/10/2014 (Post ISCO)	5/7/2015 (Post ISCO)	10/9/2015 (Post ISCO)	5/4/2016 (Post ISCO)	10/26/2016 (Post ISCO)	5/18/2017 (Post ISCO)	10/30/2017 (Post ISCO)	05/15/2018 (Post ISCO)	04/26/2019 (Post ISCO)	
		6 NYCRR Part 703/TOGS 1.1.1 Class GA Groundwater Standards											Off-Site Downgradient Locations				
VOLATILE ORGANIC COMPOUNDS (VOCs)	Units																
1,1,1-Trichloroethane	ug/L	5	<1	<0.350	<0.330	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2,2-Tetrachloroethane	ug/L	5	<1	<0.310	<0.320	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	5	<1	<0.440	<0.420	<0.46	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	ug/L	1	<1	<0.360	<0.220	<0.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	ug/L	5	<1	<0.430	<0.260	<0.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethene	ug/L	5	<1	<0.710	<0.410	<0.27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,3-Trichlorobenzene	ug/L	5	<1	<0.420	<0.210	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trichlorobenzene	ug/L	5	<1	<0.390	<0.200	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromo-3-chloropropane	ug/L	0.04	<0.05	<0.00855	<0.00855	<0.0080	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	
1,2-Dibromoethane (EDB)	ug/L	0.0006	<1	<0.00855	<0.00855	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichlorobenzene	ug/L	3	<1	<0.360	<0.230	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane (EDC)	ug/L	0.6	<1	<0.420	<0.200	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloropropane	ug/L	1	<1	<0.520	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3-Dichlorobenzene	ug/L	3	<1	<0.420	<0.230	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	ug/L	3	<1	<0.330	<0.230	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dioxane	ug/L	NC	<1	<22.5 R	<0.301	<0.97	<5	<5	<5	<3	<1	<3	<3	<1	<1	<1	
2-Butanone (MEK)	ug/L	50	<10	<0.630	<0.550	<3.3	0.69 J	<10	<10	<10	<10	<10	<10	<10	1.31 J	<10	
2-Hexanone	ug/L	50	<10	<0.260	<0.370	<0.19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
4-Methyl-2-pentanone (MIBK)	ug/L	NC	<10	<0.510	<0.350	<0.35	<10	<10	<10	<10	<10	0.10 J	<10	<10	0.17 J	<10	
Acetone	ug/L	50	3.17 J	<0.870	<0.280	<4.0	4.63 J	<10	1.70 J	<10	1.29 J	42	<10	2.61 J	4.95 J	2.82 J	
Benzene	ug/L	1	<1	2	<0.250	<0.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromochloromethane	ug/L	5	<1	<0.470	<0.300	<0.36	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	50	<1	<0.350	<0.260	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	ug/L	50	<1	<0.260	<0.460	<0.35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromomethane	ug/L	5	<1	<0.670	<0.250	<0.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon disulfide	ug/L	NC	<1	<0.500	<0.300	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	5	<1	<0.400	<0.360	<0.19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	5	<1	<0.480	<0.220	<0.16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroethane	ug/L	5	<1	<0.780	<0.360	<0.21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	ug/L	7	<1	3.81	0.563 J	<0.94 J	0.88 J	0.88 J	0.86 J	0.83 J	0.61 J	0.53 J	0.48 J	0.40 J	<1	0.20 J	
Chloromethane	ug/L	5	<1	<0.350	<0.280	<0.20	<1	<1	<1	<1	<1	<1	0.70 J	<1	<1	<1	
cis-1,2-Dichloroethene	ug/L	5	<1	1.55	1.14	0.36 J	<1	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1	
cis-1,3-Dichloropropene	ug/L	0.4	<1	<0.360	<0.250	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Cyclohexane	ug/L	NC	<1	<0.460	<0.380	<0.32	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dibromochloromethane	ug/L	50	<1	<0.360	<0.240	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Dichlorodifluoromethane	ug/L	5	<1	<0.420	<0.290	<0.57	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	5	<1	<0.340	<0.220	<0.10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isopropylbenzene	ug/L	5	<1	<0.390	<0.210	<0.12	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl acetate	ug/L	NC	<1	<0.350	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl tert-butyl ether (MTBE)	ug/L	NC	<1	<0.380	<0.240	<0.25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylcyclohexane	ug/L	NC	<1	<0.460	<0.360	<0.13	<1	<1	<1	<1	<1	<1	0.32 J	<1	<1	<1	
Methylene chloride	ug/L	5	<1	<1.98	<1.98	<0.16	<1	<1	<1	<1	<1	0.10 J	<1	<1	<1	0.32 J	
Styrene	ug/L	5	<1	<0.330	<0.250	<0.13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Tetrachloroethene	ug/L	5	<1	1.23	1.09	0.30 J	0.34 J	0.26 J	0.21 J	<1	<1	<1	<1	<1	0.28 J	0.49 J	
Toluene	ug/L	5	<1	<0.390	<0.270	<0.17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	ug/L	5	<1	<0.550	<0.350	<0.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,3-Dichloropropene	ug/L	0.4	<1	<0.320	<0.220	<0.20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	ug/L	5	<1	<0.550	<0.270	<0.29	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	5	<1	<0.660	<0.450	<0.28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	ug/L	2	<1	<0.460	<0.290	<0.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes (Total)	ug/L	5	<3	<0.630	<0.690	<0.58	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
Total VOCs	ug/L	NA	3.17 J	8.59	2.79 J	0.66	6.54 J	1.14 J	2.77 J	0.83 J	1.9 J	42.88	1.5 J	3.01 J	6.71 J	3.83 J	

Notes:
6 NYCRR Part 703 and TOGS 1.1.1 = Division of Water Technical and Operational Guidance Serie
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent
Limitations.
ft above msl = feet above mean sea level
BOLD = Exceeds TOGS 1.1.1 Class GA Groundwater Standards/Criteria
* = Analyzed for but Not Detected at the Method Detection Limit (MDL)
J = The concentration was detected at a value below the Reporting Limit (RL) and
above the MDL.
R = The result was rejected during data validation.
D = Diluted sample result
units = ug/L or parts per billion
NA = Not Available
NC = No Criteria



Figures



FIGURE 1



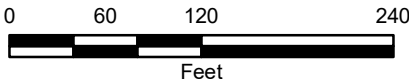
LEGEND

- OVERBURDEN MONITORING WELL
- SHALLOW BEDROCK MONITORING WELL
- DEEP BEDROCK MONITORING WELL
- PROPERTY BOUNDARY

NOTE: MW-6 AND MW-6SB
DECOMMISSIONED
DECEMBER 2018

BROWNFIELD CLEANUP
PROGRAM NO. C360115
1-5 HOLLAND AVENUE
WHITE PLAINS, NY

GROUNDWATER
MONITORING WELL
LOCATIONS



MAY 2019
14206.72276





Appendices



Groundwater Sampling Logs

Location ID	Ground Elevation (ft amsl)	Well Casing Elevation (ft amsl)	Well Screen Interval (ft)		Well Screen Interval (ft bgs)	Hydrogeologic Screen Interval	Date Deployment	Time Deployment	Depth to GW (PVC)	Date Retrieval/Sample Collection	Time Collected	Depth to GW (PVC)	Field Parameters					
			Top	Bottom									pH	Temp. (°C)	Spec. Conductance (mS/cm)	ORP (mV)	TDS (ppm)	Dis. Ox. (mg/L)
MW-1	198.9	198.61	192.7	182.7	5.9-15.9	Overburden	4/4/2019	AM	10.7	4/26/2019	1400	10.85	7.49	11.32	0.47	140.3	314	8.21
MW-2	204.7	204.39	191.4	181.4	13-23	Overburden	4/4/2019	AM	16.8	4/26/2019	1230	16.83	7.59	11.01	0.45	96.8	304	8.76
MW-2DB	204.3	204.04	136.3	126.3	68-78	Deep Bedrock	4/4/2019	AM	16.1	4/26/2019	1200	16.31	8.02	11.78	0.35	-4.2	235	0.96
MW-2SB	203.9	203.55	158.9	148.9	45-55	Shallow Bedrock	4/4/2019	AM	15.5	4/26/2019	1215	15.96	8.01	11.99	0.33	44.9	221	1.41
MW-4S	202.5	202.27	188.5	178.4	14-24	Overburden	4/4/2019	AM	14	4/26/2019	1430	14.12	10.66	12.56	0.80	64.6	537	4.46
MW-4D	202.5	202.07	168.0	158.0	34.5-44.5	Shallow Bedrock	4/4/2019	AM	13.9	4/26/2019	1445	13.93	8.63	12.49	0.50	105.2	336	8.07
MW-5	203.7	203.39	189.7	179.7	14-24	Overburden	4/4/2019	AM	15.75	4/26/2019	1100	15.81	7.18	10.24	0.32	74.6	212	8.6
MW-5DB	203.4	203.07	115.4	105.4	88-98	Deep Bedrock	4/4/2019	AM	14.55	4/26/2019	1130	15.35	9.15	11.07	0.35	-122	234	0.39
MW-5SB	203.1	202.80	155.1	145.1	48-58	Shallow Bedrock	4/4/2019	AM	14.8	4/26/2019	1145	14.86	7.96	11.29	0.65	-100.2	436	0.99
MW-7	200.2	199.73	185.2	175.2	15-25	Overburden	4/4/2019	AM	14.04	4/26/2019	830	13.9	7.32	11.33	1.62	77.7	1088	7.75
MW-7SB	200.2	199.79	156.2	146.2	44-54	Shallow Bedrock	4/4/2019	AM	13.79	4/26/2019	840	13.8	7.66	11.24	2.82	-99	1889	0.48
MW-8	197.6	197.34	182.6	172.6	15-25	Overburden	4/4/2019	AM	13.96	4/26/2019	1000	10.95	6.79	9.76	3.71	76.7	2486	1.9
MW-8SB	197.3	196.68	152.3	142.3	45-55	Shallow Bedrock	4/4/2019	AM	10.37	4/26/2019	1015	10.26	7.17	11.62	2.60	46.4	1743	1.86

Location ID	Ground Elevation (ft amsl)	Well Casing Elevation (ft amsl)	Well Screen Interval (ft)		Well Screen Interval (ft bgs)	Hydrogeologic Screen Interval	Date Deployment	Time Deployment	Depth to GW (PVC)	Date Retrieval/Sample Collection	Time Collected	Depth to GW (PVC)	Field Parameters					
			Top	Bottom									pH	Temp. (°C)	Spec. Conductance (mS/cm)	ORP (mV)	TDS (ppm)	Dis. Ox. (mg/L)
MW-9	201.3	200.80	186.3	176.3	15-25	Overburden	4/4/2019	AM	14.95	4/26/2019	930	14.95	7.28	9.3	2.23	51.9	1493	8.12
MW-9SB	201.3	200.76	155.3	145.3	46-56	Shallow Bedrock	4/4/2019	AM	14.96	4/26/2019	915	14.9	7.87	10.85	0.98	-86.1	657	1.38

Field Notes Blind Duplicate Installed: MW-8SB
MS/MSD Installed: MW-2SB
TDS calculation = (TDS) ppm = Conductivity mS/cm x 0.67 x 1,000

Sampler Deployment: Mark Randazzo
Sampler Retrieval: Mark Randazzo



INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

92 North Main St, Building 20

Windsor, NJ 08561

Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 6667

Description YSI 600 XLM

Calibrated 4/24/2019 3:33:54PM

Manufacturer YSI

Model Number 600 XLM

Serial Number/ Lot 05H2025AB
Number

Location New Jersey

Department

State Certified

Status Pass

Temp °C 26.8

Humidity % 29

Calibration Specifications

Group # 1

Group Name PH

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
7.00 / 7.00	PH	7.00	PH	7.12	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	3.89	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.23	10.00	0.00%	Pass

Group # 2

Group Name Conductivity

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.000

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
1.413 / 1.413	ms/cm	1.413	ms/cm	1.396	1.414	0.07%	Pass

Group # 3

Group Name Redox (ORP)

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
240.00 / 240.00	mv	240.00	mv	233.60	240.00	0.00%	Pass

Group # 4

Group Name Dissolved Oxygen Span

Stated Accy Pct of Reading

Range Acc % 0.0000

Reading Acc % 3.0000

Plus/Minus 0.00

<u>Nom In Val / In Val</u>	<u>In Type</u>	<u>Out Val</u>	<u>Out Type</u>	<u>End As</u>	<u>Lft As</u>	<u>Dev%</u>	<u>Pass/Fail</u>
100.00 / 100.00	%	100.00	%	91.30	99.90	-0.10%	Pass

Group # 5

Group Name Dissolved Oxygen Zero

Test Performed: N/A

As Found Result:

As Left Result:

INSTRUMENT CALIBRATION REPORT



Pine Environmental Services LLC

92 North Main St, Building 20

Windsor, NJ 08561

Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 6667

Description YSI 600 XLM

Calibrated 4/24/2019 3:33:54PM

<u>Test Instruments Used During the Calibration</u>					<u>(As Of Cal Entry Date)</u>	
<u>Test Standard ID</u>	<u>Description</u>	<u>Manufacturer</u>	<u>Model Number</u>	<u>Serial Number / Lot Number</u>	<u>Last Cal Date/ Opened Date</u>	<u>Next Cal Date / Expiration Date</u>
NJ COND 1413: 8GK310	1413 conductivity standard	AquaPhoenix Scientific	1413	8GK310	12/21/2018	11/30/2019
NJ ORP 240: 2062	ORP solution 240mv	Hanna	HI7021L	2062	1/19/2018	10/31/2022
NJ PH 10: 7GL670	BUFFER, PH10 BLUE	AquaPhoenix Scientific	PH10	7GL670	3/30/2018	12/31/2019
NJ PH 4: 7GI837	BUFFER, PH4 RED	AquaPhoenix Scientific	PH4	7GI837	3/30/2018	9/30/2019
NJ PH 7: 8GB386	BUFFER, PH7 YELLOW	AquaPhoenix Scientific	PH7	8GB386	3/30/2018	2/29/2020

Notes about this calibration

Calibration Result Calibration Successful

Who Calibrated William Bass

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment

Please call 800-301-9663 for Technical Assistance



PDB Groundwater Sampling Log

Well ID: mw-1Project No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 15.9 ft. bmp*

* Measurement Point:

Depth to Water: 10.68 ft. bmp*☒ Well CasingLength of Water Column (LWC): 5.22 ft.☐ Protective CasingPDB Midpoint: 13.3 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-45Project No.: 72276Field Personnel: MARSite Name: 1-5 Holland Avenue

Date: _____

Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 24 ft. bmp*

* Measurement Point:

Depth to Water: 14.0 ft. bmp*☒ Well CasingLength of Water Column (LWC): 10 ft.☐ Protective CasingPDB Midpoint: 19 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-4DProject No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 44.5 ft. bmp*

* Measurement Point:

Depth to Water: 13.88 ft. bmp* (4/4/19)☒ Well CasingLength of Water Column (LWC): 30.6 ft.☐ Protective CasingPDB Midpoint: 39.5 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: _____

Project No.: 72276Field Personnel: MARSite Name: 1-5 Holland Avenue

Date: _____

Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: _____ ft. bmp*

* Measurement Point:

Depth to Water: _____ ft. bmp*

☒ Well Casing

Length of Water Column (LWC): _____ ft.

☐ Protective Casing

PDB Midpoint: _____ ft.

☐ Other: _____

PDB Installation Date: _____

PDB Removal Date: _____

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA		No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-5Project No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 24 ft. bmp*

* Measurement Point:

Depth to Water: 15.75 ft. bmp*☒ Well CasingLength of Water Column (LWC): 8.25 ft.☐ Protective CasingPDB Midpoint: 19.9 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-2Project No.: 72276Field Personnel: MARSite Name: 1-5 Holland Avenue

Date: _____

Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 23 ft. bmp*

* Measurement Point:

Depth to Water: 16.76 ft. bmp*☒ Well CasingLength of Water Column (LWC): 6.2 ft.☐ Protective CasingPDB Midpoint: 19.9 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-2DB

Project No.: 72276
Site Name: 1-5 Holland Avenue
Site Loc.: One Holland Avenue Development

Field Personnel: MAR
Date: 4/4/19
Weather: Cloudy

Well Information:

Depth of Well: 78 ft. bmp*
Depth to Water: 16.09 ft. bmp*
Length of Water Column (LWC): 61.9 ft.
PDB Midpoint: 73 ft.

* Measurement Point:

- ☒ Well Casing
☐ Protective Casing
☐ Other: _____

PDB Installation Date:

4/4/19

PDB Removal Date:

4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-2SB

Project No.: 72276
Site Name: 1-5 Holland Avenue
Site Loc.: One Holland Avenue Development

Field Personnel: MAR
Date: 4/4/19
Weather: Cloudy

Well Information:

Depth of Well: 55 ft. bmp*
Depth to Water: 15.49 ft. bmp*
Length of Water Column (LWC): 39.5 ft.
PDB Midpoint: 50 ft.

* Measurement Point:

- ☒ Well Casing
☐ Protective Casing
☐ Other: _____

PDB Installation Date:

4/4/19

PDB Removal Date:

4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>9</u>	No	HCL	<2

Notes:

MS/MSD



PDB Groundwater Sampling Log

Well ID: MW-5DBProject No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 98 ft. bmp*

* Measurement Point:

Depth to Water: 14.81 ft. bmp*☒ Well CasingLength of Water Column (LWC): 83.2 ft.☐ Protective CasingPDB Midpoint: 9.3 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-5SBProject No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 58 ft. bmp*

* Measurement Point:

Depth to Water: 14.55 ft. bmp*☒ Well CasingLength of Water Column (LWC): 43.45 ft.☐ Protective CasingPDB Midpoint: 5.3 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-7Project No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 25 ft. bmp*

* Measurement Point:

Depth to Water: 14.04 ft. bmp*☒ Well CasingLength of Water Column (LWC): 10.96 ft.☐ Protective CasingPDB Midpoint: 20 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-75BProject No.: 72276Field Personnel: MARSite Name: 1-5 Holland AvenueDate: 4/4/19Site Loc.: One Holland Avenue DevelopmentWeather: Cloudy

Well Information:

Depth of Well: 54 ft. bmp*

* Measurement Point:

Depth to Water: 13.79 ft. bmp*☒ Well CasingLength of Water Column (LWC): 40.2 ft.☐ Protective CasingPDB Midpoint: 49 ft.☐ Other: _____PDB Installation Date: 4/4/19PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-8

Project No.: 72276
Site Name: 1-5 Holland Avenue
Site Loc.: One Holland Avenue Development

Field Personnel: MAR
Date: 4/4/19
Weather: Cloudy

Well Information:

Depth of Well: 25 ft. bmp*
Depth to Water: 11.04 ft. bmp*
Length of Water Column (LWC): 13.96 ft.
PDB Midpoint: 20 ft.

* Measurement Point:

- ☒ Well Casing
☐ Protective Casing
☐ Other: _____

PDB Installation Date:

4/4/19

PDB Removal Date:

4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-85B

Project No.: 72276
Site Name: 1-5 Holland Avenue
Site Loc.: One Holland Avenue Development

Field Personnel: MAR
Date: 4/4/19
Weather: Cloudy

Well Information:

Depth of Well: 108 55 ft. bmp* ✓
Depth to Water: 10.37 ft. bmp*
Length of Water Column (LWC): 44.63 ft.
PDB Midpoint: 50 ft.

* Measurement Point:

- ☒ Well Casing
☐ Protective Casing
☐ Other: _____

PDB Installation Date:

4/5/19

PDB Removal Date:

4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	<u>3</u>	No	HCL	<2

Notes:



PDB Groundwater Sampling Log

Well ID: MW-6

Project No.: 72276

Field Personnel: MAR

Site Name: 1-5 Holland Avenue

Date: 4/4/19

Site Loc.: One Holland Avenue Development

Weather: Cloudy

Well Information:

Depth of Well: 50 ft. bmp*

Depth to Water: 14.96 ft. bmp*

Length of Water Column (LWC): 41.6 ft.

PDB Midpoint: 51 ft.

* Measurement Point:

X Well Casing

☐ Protective Casing☐ Other: _____

PDB Installation Date: 4/4/19

PDB Removal Date: 4/26/19

Samples collected:[illegible]

Notes:



PDB Groundwater Sampling Log

Well ID: MW-95

Project No.: 72276

Field Personnel: MAR,

Site Name: 1-5 Holland Avenue

Date: 7/4/19

Site Loc.: One Holland Avenue Development

Weather: Cloudy

Well Information:

Depth of Well: 28 ft. bmp*

Depth to Water: 1495 ft. bmp*

Length of Water Column (LWC): 10.05 ft.

PDB Midpoint: 20 ft.

* Measurement Point:

X Well Casing

☐ Protective Casing☐ Other:

PDB Installation Date: 4/4/19

PDB Removal Date: 4/26/19

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	VOA	3	No	HCL	<2

Notes:

**Merit's Laboratory
Analytical Report**



Analytical Laboratory Report

Revised Report

Report ID: S01341.01(02)
Generated on 07/09/2019
Replaces report S01341.01(01) generated on 05/15/2019

Report to

Attention: Mark Randazzo
O'Brien & Gere Engineers
50 Main St, Suite 1060
White Plains, NY 10606

Phone: 781-883-6432 FAX:
Email: mark.randazzo@obg.com

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S01341.01-S01341.19
Project: OHAD - BCP No. C360115
Collected Date(s): 04/26/2019
Submitted Date/Time: 04/29/2019 08:15
Sampled by: Mark Randazzo
P.O. #: 11900472

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Maya Murshak
Technical Director



General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

Report Narrative

Sample results revised to report down to J values

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Method Summary

Method	Version
N/A	Not Applicable
SW5030C/8260C	SW 846 Method 8260C Revision 3 August 2006 / 5030C Revision 3 May 2003
SW8260B - SIM	SW 846 Method 8260B Revision 2 December 1996 SIMs



Sample Summary (19 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S01341.01	MW-1	Groundwater	04/26/19 14:00
S01341.02	MW-2	Groundwater	04/26/19 12:30
S01341.03	MW-2SB	Groundwater	04/26/19 12:15
S01341.04	MW-2SB MS	Groundwater	04/26/19 12:15
S01341.05	MW-2SB MSD	Groundwater	04/26/19 12:15
S01341.06	MW-2DB	Groundwater	04/26/19 12:00
S01341.07	MW-4S	Groundwater	04/26/19 14:30
S01341.08	MW-4D	Groundwater	04/26/19 14:45
S01341.09	MW-5	Groundwater	04/26/19 11:00
S01341.10	MW-5SB	Groundwater	04/26/19 11:45
S01341.11	MW-5DB	Groundwater	04/26/19 11:30
S01341.12	MW-7	Groundwater	04/26/19 08:30
S01341.13	MW-7SB	Groundwater	04/26/19 08:45
S01341.14	MW-8	Groundwater	04/26/19 10:00
S01341.15	MW-8SB	Groundwater	04/26/19 10:15
S01341.16	MW-9	Groundwater	04/26/19 09:30
S01341.17	MW-9SB	Groundwater	04/26/19 09:15
S01341.18	TB-4/26/19	Water	04/26/19 00:01
S01341.19	MW-BD-1	Groundwater	04/26/19 00:01



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.01

Sample Tag: MW-1

Collected Date/Time: 04/26/2019 14:00

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles**Method: SW8260B - SIM, Run Date: 05/09/19 22:05, Analyst: JGH**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 14:20, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	2.94	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.52	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.01 (continued)

Sample Tag: MW-1

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 14:20, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	56	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.02

Sample Tag: MW-2

Collected Date/Time: 04/26/2019 12:30

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/09/19 22:27, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 14:40, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	2.94	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.48	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.02 (continued)

Sample Tag: MW-2

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 14:40, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	40	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.03

Sample Tag: MW-2SB

Collected Date/Time: 04/26/2019 12:15

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/09/19 22:49, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 14:01, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	8.17	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	0.91	10	0.26	ug/L	1	78-93-3	JB
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.66	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank

Lab Sample ID: S01341.03 (continued)

Sample Tag: MW-2SB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 14:01, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	0.53	1	0.20	ug/L	1	127-18-4	J
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.04

Sample Tag: MW-2SB MS

Collected Date/Time: 04/26/2019 12:15

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 03:48, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	0.11	0.05		ug/L	1	96-12-8	1
1,4-Dioxane*	67	1		ug/L	1	123-91-1	2

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 11:42, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	48	1	0.18	ug/L	1	76-13-1	2
Acetone	42	10	0.56	ug/L	1	67-64-1	B2
Carbon disulfide	49	1	0.24	ug/L	1	75-15-0	2
Methyl Acetate	45	1	0.25	ug/L	1	79-20-9	2
tert-Methyl butyl ether (MTBE)	40	1	0.19	ug/L	1	1634-04-4	2
2-Butanone (MEK)	40	10	0.26	ug/L	1	78-93-3	B2
Dichlorodifluoromethane	38	1	0.50	ug/L	1	75-71-8	2
Chloromethane	45	1	0.26	ug/L	1	74-87-3	2
Vinyl chloride	47	1	0.31	ug/L	1	75-01-4	2
Bromomethane	42	1	0.32	ug/L	1	74-83-9	2
Chloroethane	47	1	0.34	ug/L	1	75-00-3	2
Trichlorofluoromethane	38	1	0.33	ug/L	1	75-69-4	2
1,1-Dichloroethene	44	1	0.27	ug/L	1	75-35-4	2
Methylene chloride	42	1	0.29	ug/L	1	75-09-2	B2
trans-1,2-Dichloroethene	45	1	0.20	ug/L	1	156-60-5	2
1,1-Dichloroethane	45	1	0.20	ug/L	1	75-34-3	2
cis-1,2-Dichloroethene	45	1	0.26	ug/L	1	156-59-2	2
Chloroform	42	1	0.20	ug/L	1	67-66-3	2
Bromochloromethane	41	1	0.38	ug/L	1	74-97-5	2
1,1,1-Trichloroethane	42	1	0.28	ug/L	1	71-55-6	2
Cyclohexane	44	1	0.29	ug/L	1	110-82-7	2
4-Methyl-2-pentanone (MIBK)	44	10	0.14	ug/L	1	108-10-1	2
2-Hexanone	44	10	0.29	ug/L	1	591-78-6	2
Carbon tetrachloride	42	1	0.20	ug/L	1	56-23-5	2
Benzene	49	1	0.20	ug/L	1	71-43-2	2
1,2-Dichloroethane	38	1	0.16	ug/L	1	107-06-2	2
Trichloroethene	48	1	0.23	ug/L	1	79-01-6	2
1,2-Dichloropropane	48	1	0.20	ug/L	1	78-87-5	2
Bromodichloromethane	43	1	0.23	ug/L	1	75-27-4	2

1-Spiked at 0.1ug/L

2-Spiked at 50ug/L

B-Compound also found in associated method blank



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.04 (continued)

Sample Tag: MW-2SB MS

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 11:42, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methyl cyclohexane	44	1	0.21	ug/L	1	108-87-2	1
cis-1,3-Dichloropropene	46	1	0.19	ug/L	1	10061-01-5	1
Toluene	46	1	0.25	ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	44	1	0.25	ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	44	1	0.28	ug/L	1	79-00-5	1
Tetrachloroethene	52	1	0.20	ug/L	1	127-18-4	1
Dibromochloromethane	43	1	0.24	ug/L	1	124-48-1	1
1,2-Dibromoethane	45	1	0.30	ug/L	1	106-93-4	1
Chlorobenzene	46	1	0.17	ug/L	1	108-90-7	1
Ethylbenzene	46	1	0.26	ug/L	1	100-41-4	1
Total Xylenes	132	3	0.66	ug/L	1	1330-20-7	1
Styrene	44	1	0.18	ug/L	1	100-42-5	1
Isopropylbenzene	44	1	0.25	ug/L	1	98-82-8	1
Bromoform	42	1	0.22	ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	45	1	0.18	ug/L	1	79-34-5	1
1,3-Dichlorobenzene	43	1	0.24	ug/L	1	541-73-1	1
1,4-Dichlorobenzene	44	1	0.23	ug/L	1	106-46-7	1
1,2-Dichlorobenzene	44	1	0.28	ug/L	1	95-50-1	1
1,2,4-Trichlorobenzene	40	1	0.19	ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	40	1	0.20	ug/L	1	87-61-6	1

1-Spiked at 50ug/L



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.05

Sample Tag: MW-2SB MSD

Collected Date/Time: 04/26/2019 12:15

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 04:08, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	0.11	0.05		ug/L	1	96-12-8	1
1,4-Dioxane*	65	1		ug/L	1	123-91-1	2

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 12:01, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	52	1	0.18	ug/L	1	76-13-1	2
Acetone	48	10	0.56	ug/L	1	67-64-1	B2
Carbon disulfide	53	1	0.24	ug/L	1	75-15-0	2
Methyl Acetate	50	1	0.25	ug/L	1	79-20-9	2
tert-Methyl butyl ether (MTBE)	44	1	0.19	ug/L	1	1634-04-4	2
2-Butanone (MEK)	46	10	0.26	ug/L	1	78-93-3	B2
Dichlorodifluoromethane	41	1	0.50	ug/L	1	75-71-8	2
Chloromethane	48	1	0.26	ug/L	1	74-87-3	2
Vinyl chloride	51	1	0.31	ug/L	1	75-01-4	2
Bromomethane	45	1	0.32	ug/L	1	74-83-9	2
Chloroethane	51	1	0.34	ug/L	1	75-00-3	2
Trichlorofluoromethane	41	1	0.33	ug/L	1	75-69-4	2
1,1-Dichloroethene	48	1	0.27	ug/L	1	75-35-4	2
Methylene chloride	45	1	0.29	ug/L	1	75-09-2	B2
trans-1,2-Dichloroethene	49	1	0.20	ug/L	1	156-60-5	2
1,1-Dichloroethane	49	1	0.20	ug/L	1	75-34-3	2
cis-1,2-Dichloroethene	49	1	0.26	ug/L	1	156-59-2	2
Chloroform	46	1	0.20	ug/L	1	67-66-3	2
Bromochloromethane	45	1	0.38	ug/L	1	74-97-5	2
1,1,1-Trichloroethane	46	1	0.28	ug/L	1	71-55-6	2
Cyclohexane	48	1	0.29	ug/L	1	110-82-7	2
4-Methyl-2-pentanone (MIBK)	49	10	0.14	ug/L	1	108-10-1	2
2-Hexanone	50	10	0.29	ug/L	1	591-78-6	2
Carbon tetrachloride	45	1	0.20	ug/L	1	56-23-5	2
Benzene	52	1	0.20	ug/L	1	71-43-2	2
1,2-Dichloroethane	40	1	0.16	ug/L	1	107-06-2	2
Trichloroethene	52	1	0.23	ug/L	1	79-01-6	2
1,2-Dichloropropane	51	1	0.20	ug/L	1	78-87-5	2
Bromodichloromethane	47	1	0.23	ug/L	1	75-27-4	2

1-Spiked at 0.1ug/L

2-Spiked at 50ug/L

B-Compound also found in associated method blank



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.05 (continued)

Sample Tag: MW-2SB MSD

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 12:01, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Methyl cyclohexane	46	1	0.21	ug/L	1	108-87-2	1
cis-1,3-Dichloropropene	50	1	0.19	ug/L	1	10061-01-5	1
Toluene	50	1	0.25	ug/L	1	108-88-3	1
trans-1,3-Dichloropropene	48	1	0.25	ug/L	1	10061-02-6	1
1,1,2-Trichloroethane	48	1	0.28	ug/L	1	79-00-5	1
Tetrachloroethene	55	1	0.20	ug/L	1	127-18-4	1
Dibromochloromethane	48	1	0.24	ug/L	1	124-48-1	1
1,2-Dibromoethane	50	1	0.30	ug/L	1	106-93-4	1
Chlorobenzene	51	1	0.17	ug/L	1	108-90-7	1
Ethylbenzene	51	1	0.26	ug/L	1	100-41-4	1
Total Xylenes	146	3	0.66	ug/L	1	1330-20-7	1
Styrene	48	1	0.18	ug/L	1	100-42-5	1
Isopropylbenzene	49	1	0.25	ug/L	1	98-82-8	1
Bromoform	47	1	0.22	ug/L	1	75-25-2	1
1,1,2,2-Tetrachloroethane	52	1	0.18	ug/L	1	79-34-5	1
1,3-Dichlorobenzene	47	1	0.24	ug/L	1	541-73-1	1
1,4-Dichlorobenzene	48	1	0.23	ug/L	1	106-46-7	1
1,2-Dichlorobenzene	47	1	0.28	ug/L	1	95-50-1	1
1,2,4-Trichlorobenzene	43	1	0.19	ug/L	1	120-82-1	1
1,2,3-Trichlorobenzene	43	1	0.20	ug/L	1	87-61-6	1

1-Spiked at 50ug/L



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.06

Sample Tag: MW-2DB

Collected Date/Time: 04/26/2019 12:00

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/09/19 23:10, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:00, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	3.30	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.45	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.06 (continued)

Sample Tag: MW-2DB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:00, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	6	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.07

Sample Tag: MW-4S

Collected Date/Time: 04/26/2019 14:30

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/09/19 23:32, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:20, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	2.71	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.48	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.07 (continued)

Sample Tag: MW-4S

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:20, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	24	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.08

Sample Tag: MW-4D

Collected Date/Time: 04/26/2019 14:45

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles**Method: SW8260B - SIM, Run Date: 05/09/19 23:53, Analyst: JGH**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:39, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	3.35	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	0.40	1	0.26	ug/L	1	74-87-3	J
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.56	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.08 (continued)

Sample Tag: MW-4D

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:39, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	0.29	1	0.25	ug/L	1	108-88-3	J
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	116	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.09

Sample Tag: MW-5

Collected Date/Time: 04/26/2019 11:00

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles**Method: SW8260B - SIM, Run Date: 05/10/19 00:15, Analyst: JGH**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:59, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	3.25	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.41	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.09 (continued)

Sample Tag: MW-5

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 15:59, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	7	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.10

Sample Tag: MW-5SB

Collected Date/Time: 04/26/2019 11:45

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles**Method: SW8260B - SIM, Run Date: 05/10/19 00:36, Analyst: JGH**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 16:19, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	2.91	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	0.32	1	0.31	ug/L	1	75-01-4	J
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.47	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	0.27	1	0.26	ug/L	1	156-59-2	J
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	2	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.10 (continued)

Sample Tag: MW-5SB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 16:19, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	7	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.11

Sample Tag: MW-5DB

Collected Date/Time: 04/26/2019 11:30

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 00:57, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 16:39, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	4.05	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	0.31	1	0.26	ug/L	1	74-87-3	J
Vinyl chloride	0.59	1	0.31	ug/L	1	75-01-4	J
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.62	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	0.29	1	0.20	ug/L	1	67-66-3	J
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.11 (continued)

Sample Tag: MW-5DB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 16:39, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	0.51	1	0.20	ug/L	1	127-18-4	J
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.12

Sample Tag: MW-7

Collected Date/Time: 04/26/2019 08:30

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 01:18, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 16:59, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	3.35	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	Not detected	1	0.29	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.12 (continued)

Sample Tag: MW-7

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 16:59, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	54	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.13

Sample Tag: MW-7SB

Collected Date/Time: 04/26/2019 08:45

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 01:40, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 17:18, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	2.35	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.47	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	7	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	0.35	1	0.23	ug/L	1	79-01-6	J
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.13 (continued)

Sample Tag: MW-7SB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 17:18, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	0.27	1	0.20	ug/L	1	127-18-4	J
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.14

Sample Tag: MW-8

Collected Date/Time: 04/26/2019 10:00

Matrix: Groundwater

COC Reference: 122822

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 02:01, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 17:38, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	4.18	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	12	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.35	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	0.24	1	0.20	ug/L	1	156-60-5	J
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	2	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	0.27	1	0.23	ug/L	1	79-01-6	J
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.14 (continued)

Sample Tag: MW-8

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 17:38, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	2	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.15

Sample Tag: MW-8SB

Collected Date/Time: 04/26/2019 10:15

Matrix: Groundwater

COC Reference: 122474

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles**Method: SW8260B - SIM, Run Date: 05/10/19 02:22, Analyst: JGH**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 17:58, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	1.94	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.31	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	7	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	14	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.15 (continued)

Sample Tag: MW-8SB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 17:58, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	177	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.16

Sample Tag: MW-9

Collected Date/Time: 04/26/2019 09:30

Matrix: Groundwater

COC Reference: 122474

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 02:44, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 05/07/19 15:06, Analyst: JML

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	3.17	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	Not detected	1	0.29	ug/L	1	75-09-2	
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.16 (continued)

Sample Tag: MW-9

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 05/07/19 15:06, Analyst: JML (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.17

Sample Tag: MW-9SB

Collected Date/Time: 04/26/2019 09:15

Matrix: Groundwater

COC Reference: 122474

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/10/19 03:06, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 18:38, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	2.82	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.32	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	0.20	1	0.20	ug/L	1	67-66-3	J
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.17 (continued)

Sample Tag: MW-9SB

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 18:38, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	0.49	1	0.20	ug/L	1	127-18-4	J
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	

J-Estimated value less than reporting limit, but greater than MDL



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.18

Sample Tag: TB-4/26/19

Collected Date/Time: 04/26/2019 00:01

Matrix: Water

COC Reference: 122474

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles

Method: SW8260B - SIM, Run Date: 05/09/19 21:44, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 13:41, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	4.74	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.74	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	Not detected	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	Not detected	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.18 (continued)

Sample Tag: TB-4/26/19

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 13:41, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	Not detected	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	



Analytical Laboratory Report

Revised Report

Lab Sample ID: S01341.19

Sample Tag: MW-BD-1

Collected Date/Time: 04/26/2019 00:01

Matrix: Groundwater

COC Reference: 122474

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	40ml Glass	HCL	Yes	3.9	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
pH check for VOCs*	<2	N/A	05/01/19 12:00	JML	

Organics - Volatiles**Method: SW8260B - SIM, Run Date: 05/10/19 03:27, Analyst: JGH**

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,2-Dibromo-3-chloropropane*	Not detected	0.05		ug/L	1	96-12-8	
1,4-Dioxane*	Not detected	1		ug/L	1	123-91-1	

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 18:57, Analyst: JGH

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
1,1,2-Trichloro-1,2,2-trifluoroethane	Not detected	1	0.18	ug/L	1	76-13-1	
Acetone	3.38	10	0.56	ug/L	1	67-64-1	JB
Carbon disulfide	Not detected	1	0.24	ug/L	1	75-15-0	
Methyl Acetate	Not detected	1	0.25	ug/L	1	79-20-9	
tert-Methyl butyl ether (MTBE)	Not detected	1	0.19	ug/L	1	1634-04-4	
2-Butanone (MEK)	Not detected	10	0.26	ug/L	1	78-93-3	
Dichlorodifluoromethane	Not detected	1	0.50	ug/L	1	75-71-8	
Chloromethane	Not detected	1	0.26	ug/L	1	74-87-3	
Vinyl chloride	Not detected	1	0.31	ug/L	1	75-01-4	
Bromomethane	Not detected	1	0.32	ug/L	1	74-83-9	
Chloroethane	Not detected	1	0.34	ug/L	1	75-00-3	
Trichlorofluoromethane	Not detected	1	0.33	ug/L	1	75-69-4	
1,1-Dichloroethene	Not detected	1	0.27	ug/L	1	75-35-4	
Methylene chloride	0.30	1	0.29	ug/L	1	75-09-2	JB
trans-1,2-Dichloroethene	Not detected	1	0.20	ug/L	1	156-60-5	
1,1-Dichloroethane	Not detected	1	0.20	ug/L	1	75-34-3	
cis-1,2-Dichloroethene	7	1	0.26	ug/L	1	156-59-2	
Chloroform	Not detected	1	0.20	ug/L	1	67-66-3	
Bromochloromethane	Not detected	1	0.38	ug/L	1	74-97-5	
1,1,1-Trichloroethane	Not detected	1	0.28	ug/L	1	71-55-6	
Cyclohexane	Not detected	1	0.29	ug/L	1	110-82-7	
4-Methyl-2-pentanone (MIBK)	Not detected	10	0.14	ug/L	1	108-10-1	
2-Hexanone	Not detected	10	0.29	ug/L	1	591-78-6	
Carbon tetrachloride	Not detected	1	0.20	ug/L	1	56-23-5	
Benzene	Not detected	1	0.20	ug/L	1	71-43-2	
1,2-Dichloroethane	Not detected	1	0.16	ug/L	1	107-06-2	
Trichloroethene	13	1	0.23	ug/L	1	79-01-6	
1,2-Dichloropropane	Not detected	1	0.20	ug/L	1	78-87-5	
Bromodichloromethane	Not detected	1	0.23	ug/L	1	75-27-4	
Methyl cyclohexane	Not detected	1	0.21	ug/L	1	108-87-2	
cis-1,3-Dichloropropene	Not detected	1	0.19	ug/L	1	10061-01-5	

J-Estimated value less than reporting limit, but greater than MDL B-Compound also found in associated method blank



Lab Sample ID: S01341.19 (continued)

Sample Tag: MW-BD-1

TCL Volatile Organics 8260, Method: SW5030C/8260C, Run Date: 04/30/19 18:57, Analyst: JGH (continued)

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Toluene	Not detected	1	0.25	ug/L	1	108-88-3	
trans-1,3-Dichloropropene	Not detected	1	0.25	ug/L	1	10061-02-6	
1,1,2-Trichloroethane	Not detected	1	0.28	ug/L	1	79-00-5	
Tetrachloroethene	168	1	0.20	ug/L	1	127-18-4	
Dibromochloromethane	Not detected	1	0.24	ug/L	1	124-48-1	
1,2-Dibromoethane	Not detected	1	0.30	ug/L	1	106-93-4	
Chlorobenzene	Not detected	1	0.17	ug/L	1	108-90-7	
Ethylbenzene	Not detected	1	0.26	ug/L	1	100-41-4	
Total Xylenes	Not detected	3	0.66	ug/L	1	1330-20-7	
Styrene	Not detected	1	0.18	ug/L	1	100-42-5	
Isopropylbenzene	Not detected	1	0.25	ug/L	1	98-82-8	
Bromoform	Not detected	1	0.22	ug/L	1	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	1	0.18	ug/L	1	79-34-5	
1,3-Dichlorobenzene	Not detected	1	0.24	ug/L	1	541-73-1	
1,4-Dichlorobenzene	Not detected	1	0.23	ug/L	1	106-46-7	
1,2-Dichlorobenzene	Not detected	1	0.28	ug/L	1	95-50-1	
1,2,4-Trichlorobenzene	Not detected	1	0.19	ug/L	1	120-82-1	
1,2,3-Trichlorobenzene	Not detected	1	0.20	ug/L	1	87-61-6	

Merit Laboratories Login Checklist

Lab Set ID:S01341

Client:OBGNY (O'Brien & Gere Engineers, Inc.)

Project: OHAD - BCP No. C360115

Submitted:04/29/2019 08:15 Login User: SRS

Attention: Mark Randazzo

Address: O'Brien & Gere Engineers
50 Main St, Suite 1060
White Plains, NY 10606

Phone: 781-883-6432 FAX:

Email: mark.randazzo@obg.com

Selection	Description	Note
Sample Receiving		
01.	☒ Yes ☐ No ☐ N/A	Samples are received at 4C +/- 2C Thermometer # IR 3.9
02.	☒ Yes ☐ No ☐ N/A	Received on ice/ cooling process begun
03.	☒ Yes ☐ No ☐ N/A	Samples shipped FedEx
04.	☐ Yes ☒ No ☐ N/A	Samples left in 24 hr. drop box
05.	☒ Yes ☐ No ☐ N/A	Are there custody seals/tape or is the drop box locked
Chain of Custody		
06.	☒ Yes ☐ No ☐ N/A	COC adequately filled out
07.	☒ Yes ☐ No ☐ N/A	COC signed and relinquished to the lab
08.	☒ Yes ☐ No ☐ N/A	Sample tag on bottles match COC
09.	☐ Yes ☒ No ☐ N/A	Subcontracting needed? Subcontacted to:
Preservation		
10.	☒ Yes ☐ No ☐ N/A	Do sample have correct chemical preservation
11.	☐ Yes ☐ No ☒ N/A	Completed pH checks on preserved samples? (no VOAs)
12.	☐ Yes ☒ No ☐ N/A	Did any samples need to be preserved in the lab?
Bottle Conditions		
13.	☒ Yes ☐ No ☐ N/A	All bottles intact
14.	☒ Yes ☐ No ☐ N/A	Appropriate analytical bottles are used
15.	☒ Yes ☐ No ☐ N/A	Merit bottles used
16.	☒ Yes ☐ No ☐ N/A	Sufficient sample volume received
17.	☐ Yes ☒ No ☐ N/A	Samples require laboratory filtration
18.	☒ Yes ☐ No ☐ N/A	Samples submitted within holding time
19.	☐ Yes ☒ No ☐ N/A	Do water VOC or TOX bottles contain headspace

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # 1 OF 2 122822

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME <u>Mark A. Randa</u>	
COMPANY <u>O'Brien & Gere Engineers</u>	
ADDRESS <u>50 Main Street, Suite 1060</u>	
CITY <u>White Plains</u>	STATE <u>NY</u> ZIP CODE <u>10606</u>
PHONE NO. <u>781-883-6432</u>	FAX NO. <u>11900472</u>
E-MAIL ADDRESS <u>Mark.Randa@obg.com</u>	QUOTE NO.

CONTACT NAME <u>SAME</u>	
COMPANY	
ADDRESS	
CITY	STATE ZIP CODE
PHONE NO.	E-MAIL ADDRESS

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME <u>OHAD - BCP NO.C360115</u>	SAMPLER(S) - PLEASE PRINT/SIGN NAME <u>Mark Randa</u>
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER	

MATRIX CODE:	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIFE	A=AIR

Containers & Preservatives

Certifications

☐ OHIO VAP ☐ Drinking Water

☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☒ New York

☒ Other QCD

Special Instructions

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives							
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	
01341.01	4/26	1400	MW-1	GW	3		X						X
.02	4/26	1230	MW-2	GW	3		X						X
03/04/05	4/26	1215	MW-2SB	GW	9		X						X
.06 .04	4/26	1200	MW-2DB	GW	3		X						X
.07 .05	4/26	1430	MW-4S	GW	3		X						X
.08 .06	4/26	1445	MW-4D	GW	3		X						X
.09 .07	4/26	1100	MW-5	GW	3		X						X
.10 .08	4/26	1130	MW-5SB	GW	3		X						X
.11 .09	4/26	1130	MW-5DB	GW	3		X						X
.12 .10	4/26/19	0830	MW-7	GW	3		X						X
.13 .11	4/26/19	0845	MW-7SB	GW	3		X						X
.14 .12	4/26/19	1000	MW-8	GW	3		X						X

RELINQUISHED BY: <u>Mark Randa</u>	SAMPLER <u>X</u>	DATE <u>4/26/19</u>	TIME <u>1610</u>
SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: <u>FEDEX</u>			
SIGNATURE/ORGANIZATION			
RELINQUISHED BY: <u>FEDEX</u>		DATE <u>04/27/19</u>	TIME <u>1050</u>
SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY: <u>FEDEX</u>		DATE <u>04/27/19</u>	TIME <u>1030</u>
SIGNATURE/ORGANIZATION			

RELINQUISHED BY: <u>Maya Mushy</u>	DATE <u>04/27/19</u>	TIME <u>1130</u>
SIGNATURE/ORGANIZATION		
RECEIVED BY: <u>Merit Fridge</u>	DATE <u>4/27/19</u>	TIME <u>1130</u>
SIGNATURE/ORGANIZATION		
SEAL NO. <u>Merit Fridge</u>	SEAL INTACT <u>YES</u>	INITIALS <u>MF</u>
SEAL NO. <u>Merit Fridge</u>	SEAL INTACT <u>YES</u>	INITIALS <u>MF</u>
NOTES <u>4/29/19 815</u>	TEMP. ON ARRIVAL <u>2.9</u>	
NOTES <u>4/29/19 815</u>		

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



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C.O.C. PAGE # 2 OF 2

122474

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME **Mark A. Randazzo**
COMPANY **O'Brien & Gere Engineers**
ADDRESS **50 Main Street, Suite 1060**
CITY **White Plains** STATE **NY** ZIP CODE **10606**
PHONE NO. **781-883-6432** FAX NO. **11900472**
E-MAIL ADDRESS **Mark.Randazzo@OBG.com**

CONTACT NAME **SAME**
COMPANY
ADDRESS
CITY STATE ZIP CODE
PHONE NO. E-MAIL ADDRESS

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME **OHAD-BLP No. C360115** SAMPLER(S) - PLEASE PRINT/SIGN NAME **Mark Randazzo**
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☒ EDD ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

Containers & Preservatives
Certifications
☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES
Project Locations
☐ Detroit ☒ New York
☒ Other **QCD**
Special Instructions

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives							
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	
01341.15	4/26/19	1015	MW-8SB	GW	3		X						X
.16	4/26/19	0930	MW-9	GW	3		X						X
.17	4/26/19	0915	MW-9SB	GW	3		X						X
.18	-	-	TB-4/26/19	-	2		X						X
.19	4/26/19	-	MW-BD-1	GW	3		X						X

RELINQUISHED BY: **FEDEX** DATE **4/26/19** TIME **1610**
RECEIVED BY: **FEDEX** DATE **4/27/19** TIME **1030am**
RELINQUISHED BY: **FEDEX** DATE **4/27/19** TIME **1030am**
RECEIVED BY: **FEDEX** DATE **4/27/19** TIME **1030am**

RELINQUISHED BY: **Merit** DATE **4/29/19** TIME **1130**
RECEIVED BY: **Merit** DATE **4/29/19** TIME **1130**
SEAL NO. **Merit** SEAL INTACT **YES** INITIALS **4/29/19** TEMP. ON ARRIVAL **3.9**
SEAL NO. **Merit** SEAL INTACT **YES** INITIALS **4/29/19** Shipped on ICE

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY/ON REVERSE SIDE



Data Usability Summary Report

MEMORANDUM

TO: Mark Randazzo
FROM: KA Storne
RE: Data Usability Summary Report for One
Holland Avenue Site, Sampling April 2019
FILE: 14206/72276
DATE: July 18, 2019

cc: Doug Crawford, PE
Guy Swenson, CPG

This Data Usability Summary Report (DUSR) presents the results of data validation performed for groundwater samples collected by O'Brien & Gere, Part of Ramboll (OBG) in April 2019 as part of the 1-5 Holland Avenue Site Remedial Investigation (RI) in White Plains, New York.

Merit Laboratories, Inc. (Merit) of East Lansing, Michigan performed the laboratory analyses for the sampling event. The laboratory packages contain summary forms for quality control analysis and supportive raw data.

The analysis performed for this sampling event is summarized in Table 1.

Table 1. Analytical Methods and References

Parameter	Method	Reference
Volatile Organic Compounds (VOCs)	USEPA Method 8260B/8260C/SIM	1

Notes:

1. United States Environmental Protection Agency (USEPA). 2006. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846*, 3rd Edition. Washington D.C.
2. SIM indicates selected ion monitoring.

The samples submitted for data validation are summarized in attached Table 2. Table 3 presents the specific data validation approach applied to data generated for this investigation. Table 4 presents the Laboratory QA/QC analysis definitions.

Full validation was performed on the samples collected for this sampling event.

The analytical data generated for this investigation were evaluated by OBG using the quality assurance/quality control (QA/QC) information presented in the following document:

- O'Brien & Gere. 2010. *Quality Control Document (QCD), 1 – 5 Holland Avenue Site White Plains, New York*. Syracuse, New York.

Data affected by excursions from the previously mentioned QA/QC criteria were qualified using the following USEPA data validation guidance and professional judgment:

- USEPA. 2014. *USEPA Region II Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C, SOP HW-24 Revision 4*.

Qualifiers were applied to data that failed to meet the quality control criteria presented in the USEPA methods and the QCD applying professional judgement.

The validation included evaluating the following audit parameters:

- QCD compliance
- Chain-of-custody record
- Sample collection
- Holding times
- Calibrations

- Blank analysis
- Surrogate results
- Matrix spike/ matrix spike duplicate (MS/MSD) analysis
- Laboratory control sample (LCS) analysis
- Internal standards performance
- Field duplicate analysis
- Gas chromatography/mass spectrometry (GC/MS) instrument performance check
- Target analyte quantitation, identification, and quantitation limits (QLs); and
- Documentation completeness.

The following sections of this report present the results of the comparison of the analytical data to the QA/QC criteria specified above. Based on the QA/QC information review, an overall evaluation of data usability is also presented in the final section.

VOLATILE ORGANIC COMPOUND DATA EVALUATION SUMMARY

The following QA/QC parameters were found to meet method and validation criteria or did not result in additional qualification of sample results:

- QCD compliance
- Sample collection
- Holding times
- Surrogate results
- LCS analysis
- Internal standards performance
- Field duplicate analysis
- GC/MS instrument performance check
- Target analyte identification

Excursions from method or validation criteria and additional observations are described below.

I. CHAIN OF CUSTODY RECORD

For the samples collected 4/26/19, the year the samples were collected was not consistently documented for each sample listed on the chain-of-custody record.

II. BLANK ANALYSIS

The following results were qualified as non-detected (U) due to minor blank representativeness excursions:

- Results for acetone in samples MW-1, MW-2, MW-2SB, MW-2DB, MW-4S, MW-4D, MW-5, MW-5SB, MW-5DB, MW-7, MW-7SB, MW-8, MW-8SB, MW-9, MW-9SB and MW-BD-1 [MW-8SB]].
- Results for methylene chloride in samples MW-1, MW-2, MW-2SB, MW-2DB, MW-4S, MW-4D, MW-5, MW-5SB, MW-5DB, MW-7SB, MW-8, MW-8SB, MW-9SB and MW-BD-1 [MW-8SB]].
- Result for 2-butanone in samples MW-2SB.

III. CALIBRATIONS

The following results were qualified as approximate (UJ, J) due to minor calibration accuracy excursions:

- Results for acetone, 2-methyl-2-pentanone and 2-hexanone in samples MW-1, MW-2, MW-2SB, MW-2DB, MW-4S, MW-4D, MW-5, MW-5SB, MW-5DB, MW-7, MW-7SB, MW-8, MW-8SB, MW-9, MW-9SB, TB-4/26/19 and MW-BD-1 [MW-8SB]].
- 2-Hexanone, 1,1,2-trichloro-1,2,2-trifluoroethane, and vinyl chloride in samples MW-1, MW-2, MW-2SB, MW-2DB, MW-4S, MW-4D, MW-5, MW-5SB, MW-5DB, MW-7, MW-7SB, MW-8, MW-8SB, MW-9SB, TB-4/26/19 and MW-BD-1 [MW-8SB]].
- 4-Methyl-2-pentanone, 2-hexanone, 1,1,2-trichloro-1,2,2-trifluoroethane, carbon disulfide and dichlorodifluoromethane in sample MW-9.
- Results for 1,2-dibromo-3-chloropropane and 1,4-dioxane in samples MW-1, MW-2, MW-2SB, MW-2DB, MW-4S, MW-4D, MW-5, MW-5SB, MW-5DB, MW-7, MW-7SB, MW-8, MW-8SB, MW-9, MW-9SB, TB-4/26/19 and MW-BD-1 [MW-8SB]].

IV. TARGET ANALYTE QUANTITATION AND QLS

Sample results detected at concentrations greater than laboratory MDLs but less than laboratory QLs were qualified as approximate (J).

V. DOCUMENT COMPLETENESS

As requested during data validation, the laboratory revised the quantitation reports for the samples collected during this sampling event. During the secondary review, the laboratory identified a reporting error and revised the majority of the sample results. The revised results were included in the data validation report.

DATA USABILITY

The groundwater samples collected as part of the 1-5 Holland Avenue Site RI in White Plains, New York were evaluated based on QA/QC criteria established by methods as listed in Table 1 and the data validation approach as described in Table 3.

Major deficiencies in the data generation process would have resulted in results being rejected, indicating that the rejected data are considered unusable for either quantitative or qualitative purposes. Major excursions were not identified during the validation process. Minor deficiencies in the data generation process resulted in sample data being characterized as approximate or non-detected as specified above.

A discussion of the data quality with regard to the data usability parameters follows:

Precision: Data were not rejected for precision excursions.

Sensitivity: Sensitivity is established by QLs, which represent measurable concentrations of analytes which can be determined with a designated level of confidence, that meet project requirements. Dilutions were not performed for these analyses.

Accuracy: Results were not rejected due to major accuracy excursions.

Representativeness: Results were not rejected due to major representativeness excursions.

Comparability: Data usability with respect to comparability is 100 percent, as standardized analytical methods, QLs, reference materials, and data deliverables were used throughout the data generation process for this project.

Completeness: Overall data usability with respect to completeness is 100 percent for the complete data set. Therefore, the data were identified as usable for qualitative and quantitative purposes.

TABLE 2 | SAMPLE CROSS REFERENCE TABLE

Sample collected and submitted for data validation

Laboratory Name	Date Collected	Laboratory Identification	Client Identification	Matrix	Analysis Required
Merit	4/26/2019	S01341.01	MW-1	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.02	MW-2	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.03	MW-2SB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.04	MW-2SB MS	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.05	MW-2SB MSD	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.06	MW-2DB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.07	MW-4S	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.08	MW-4D	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.09	MW-5	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.10	MW-5SB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.11	MW-5DB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.12	MW-7	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.13	MW-7SB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.14	MW-8	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.15	MW-8SB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.16	MW-9	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.17	MW-9SB	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.18	TB-4/26/19	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260
Merit	4/26/2019	S01341.19	MW-BD-1 [MW-8SB]	Groundwater	1,2-Dibromo-3-chloropropane- SIM, 1,4-Dioxane- SIM, TCL VOCs- 8260

Note:

Merit indicates Merit Laboratories, Inc. of East Lansing, Michigan.

VOCs indicates volatile organic compounds.

SIM indicates selected ion monitoring.

TB indicates trip blank.

MS/MSD indicates matrix spike/matrix spike duplicate.

BD indicates field duplicate.

The location in brackets indicates the field duplicate sampling location.

O'Brien & Gere Data validation approach based on USEPA Region II data validation guidelines for the following SW-846 analytical method: VOCs (8260C)

General Validation Approach	The validation approach taken by O'Brien & Gere is a conservative one; qualifiers are applied to sample data to indicate both major and minor excursions so that data associated with any type of excursion are identified to the data user. Major excursions result in data being rejected (R), indicating that the data are considered unusable for either quantitative or qualitative purposes. Minor excursions result in sample data being qualified as approximate (J, UJ, JN) or non-detected (U) that is otherwise usable for quantitative or qualitative purposes. Excursions are subdivided into excursions that are within the laboratory's control and those that are out of the laboratory's control. Excursions involving laboratory control sample recovery, calibration response, method blank excursions, low or high spike recovery due to inaccurate spiking solutions or poor instrument response, holding times, interpretation errors, and quantitation errors are within the control of the laboratory. Excursions resulting from matrix spike recovery, serial dilution recovery, surrogate, and internal standard performance due to interference from the matrix of the samples are examples of those excursions that are not within the laboratory's control if the laboratory has followed proper method procedures, including performing appropriate cleanup techniques.
Applying professional judgment	USEPA data validation directs professional judgment to be used when applying qualifiers in some cases. When utilizing professional judgment, provide justification for actions taken in the associated validation notes.
Validation Parameter	O'Brien & Gere Data Validation Approach based on Region II guidelines for SW-846 method. Since Region II guidelines available for metals apply only to the CLP method, only the general approach to applying qualifiers was utilized for metals and inorganics. U - The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the quantitation limit (QL).
Validation Qualifiers - Organics	J - The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the QL). NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. UJ - The analyte was not detected at a level greater than or equal to the QL. However, the QL is approximate and may be inaccurate or imprecise. R - The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
Cooler Temperature	Results for samples submitted for organic and inorganic analyses that are impacted by coolers that did not contain ice, or if the ice melted upon receipt and the cooler temperatures are greater than 10°C, are qualified as approximate (UJ, J). If samples are delivered to the laboratory the same day as sample collection and samples did not have sufficient time to reach 10°C, samples are not qualified, unless proper preservation was not provided for samples between sample collection and sample receipt at the laboratory. Results for samples received at ambient temperature involved in extended shipment-day issues may be rejected, applying professional judgment.

O'Brien & Gere Data validation approach based on USEPA Region II data validation guidelines for the following SW-846 analytical method: VOCs (8260C)

Holding Time	Results for samples analyzed less than two times the holding time window established in the method or the QAPP for preparation and/or analysis are qualified as approximate (UJ, J). Non-detected results for samples analyzed greater than two times the holding time window for preparation and/or analysis are rejected (R). Detected results for samples analyzed greater than two times the holding time window for preparation and/or analysis are qualified as approximate (J). The entire sample target list for a VOC sample impacted by a holding time excursion is qualified.
General Calibration Actions	Due to relative standard deviation (RSD) calibration excursions, detected results for analytes in samples associated with the calibration are qualified as approximate (J). Non-detected results associated with RSD excursions may be qualified as approximate (UJ) based on professional judgment. If the RSD calibration excursion is greater than 90, detected results for analytes in samples associated with the calibration are qualified as approximate (J) and non-detected results may be rejected (R), applying professional judgment. Due to %D calibration verification excursions, detected and non-detected results for analytes in samples associated with the calibration are qualified as approximate (J, UJ). The response direction and detection of target analytes in associated sample may be considered in applying qualifiers. For response factor excursions, detected results are qualified as approximate (J) and non-detected results are rejected (R). For initial calibration verifications (ICV) excursions, detected and non-detected results for analytes in samples associated with the calibration are qualified as approximate (J, UJ). The response direction and detection of target analytes in associated sample may be considered in applying qualifiers.
VOCs Calibration Evaluation	VOC target analytes are evaluated using the criteria of 20 percent relative standard deviation (%RSD) or correlation coefficient of 0.990 for initial calibration curves. Calibration verifications are evaluated using a criterion of 20 percent difference (%D) for target analytes. Initial calibrations and calibration verifications are also evaluated using the response factor (RF) criteria described in the method Table 4. If not listed on the Table, $RF \geq 0.05$, $RF \geq 0.01$ for other poor responding analytes. ICV recoveries are evaluated using laboratory control limits if available or 70 to 130%.
Associating samples with Field and Laboratory QC Samples	Trip blanks are associated with samples in the same sample cooler. Equipment blanks (Rinsate blanks) are associated with samples collected in the same day (or sampling event) using the same sample collection equipment and decontamination solutions. When sampling equipment or decontamination solutions are changed, a new equipment blank should be collected. Each sample should be associated with one equipment blank, which is collected as close to the sample collection date/time as possible. Use professional judgment. Field blanks are associated with the sample containers used to collect samples. When sampling container lots are changed, a new field blank should be collected.

O'Brien & Gere Data validation approach based on USEPA Region II data validation guidelines for the following SW-846 analytical method: VOCs (8260C)

	Method blanks are associated with samples prepared at the same time (if preparation is required) or analyzed in the same analytical batch as the samples. Method blanks should reflect the sample matrix type (aqueous, low level solid, medium level solid). LCSs are associated with samples prepared at the same time (if preparation is required) or analyzed in the same analytical batch as the samples. MS/MSD and laboratory duplicate samples are collected in the field. The laboratory must prepare using project samples. MS/MSDs and laboratory duplicates are associated with samples prepared at the same time or close to the same time (if preparation is required) with the same matrix type. Field duplicates are collected in the field and are associated with samples of the same matrix type. In the case that insufficient QC samples are provided due to field or laboratory problems, use professional judgment to associate each sample with a QC sample that reflects the sample matrix and analysis conditions. If insufficient QC samples are available to properly associate samples, record the impact in the DV notes.
Evaluation and Action for MS/MSD, LCS,	The laboratory control limit (CL) is used to assess MS/MSD, LCS, surrogate and laboratory duplicate data. Refer to Region II guidelines if laboratory control limits are not available.
Surrogate and Laboratory Duplicate Data for VOCs	In the case that excursions are identified in more than one quality control sample of the same matrix within one sample delivery group, samples are batched according to sample preparation or analysis date and qualified accordingly (see batching description above) If percent recoveries are less than laboratory CLs but greater than 10%, non-detected and detected results are qualified as approximate (UJ, J). If percent recoveries are greater than laboratory CLs, detected results are qualified as approximate (J). If percent recoveries are less than 10%, detected results are qualified as approximate (J) and non-detected results are qualified as rejected (R). If RPDs for MSDs or laboratory duplicates are outside of laboratory CLs, detected results are qualified as approximate (J). Non-detected results may not be qualified, applying professional judgment.
Evaluation of MS/MSD, Surrogate, and Field Duplicate Data for VOCs	Qualification is performed only when both MS and MSD recoveries are outside of laboratory CLs. Organic data are rejected (R) in the case that both MS/MSD recoveries are less than 10%. Qualification is not performed if MS/MSD or surrogate recoveries are outside of laboratory CLs with an analysis that applied a dilution factor of 10 times or more, applying professional judgment. Qualification of data associated with MS/MSD or field duplicate excursions is limited to the un-spiked sample or the field duplicate pair, respectively. Field duplicate data are evaluated against relative percent difference (RPD) criteria of less than 50 percent for aqueous samples and less than 100 percent for soils when results are greater than or equal to five times the QL. When a field duplicate result is less than five times the QL, a control limit of plus or minus two times the QL (difference criterion) is applied. If RPDs or differences are outside of criterion, detected and non-detected results are qualified as approximate (UJ, J) to indicate minor excursions.

O'Brien & Gere Data validation approach based on USEPA Region II data validation guidelines for the following SW-846 analytical method: VOCs (8260C)

**Evaluation and
Actions for Blank
Results for VOC
Data**

Blanks are not qualified due to contamination of another blank.

Sample results qualified as non-detected (U) are treated as hits when qualifying for surrogate or calibration excursions.

The following approach is utilized for applying qualifiers, using twice the quantitation limit (QL) for methylene chloride, 2-butanone and acetone:

1. For blank results less than the QL, samples with concentrations less than the QL are reported at the QL and qualified as non-detected (U). Samples with concentrations greater than or equal to the QL are not qualified or may apply the Blank Rule Option.
2. For blank results greater than the QL, samples with concentrations less than the QL are reported at the QL and qualified as non-detected (U). Samples with concentrations greater than or equal to the QL and less than the blank contamination level are reported and qualified as non-detected (U). Samples with concentrations greater than or equal to the QL and greater than or equal to the blank contamination level are not qualified or may apply the Blank Rule Option.
3. For blank results equal to the QL, sample concentrations less than the QL are reported at the QL value and qualified as non-detected (U). Samples greater than or equal to the QL are not qualified or may apply the Blank Rule Option.
4. For gross contamination in blanks (saturated peaks, interference peaks, poor baselines), all associated sample detected results are rejected (R) or qualified as non-detected (U) using professional judgment.

Blank Rule Option:

If methylene chloride, acetone or 2-butanone is detected in the sample at a concentration that is less than ten times the concentration in the associated blank, the sample result is qualified as "U". If other target analytes are detected in the sample at a concentration that is less than five times the concentration detected in the associated blank, the sample result is qualified as "U".

Source O'Brien & Gere

Table 4. Laboratory QA/QC analysis definitions

QA/QC Term	Definition
Accuracy	The closeness or agreement of the observed value or test response to the true or acceptable reference value or the test response from a reference method. It is influenced by both random error (precision) and systematic error (bias). The terms “bias” and “precision” are often used in lieu of “accuracy”.
Precision	A measure of mutual agreement between two or more individual measurements of the same property, obtained under similar conditions.
Representativeness	A measure of the degree to which data accurately and precisely characterize a population; the correspondence between the analytical result and the actual quality or condition experienced by a contaminant receptor.
Sensitivity	The capability of a method or instrument to discriminate between measurement responses representing different levels of a variable of interest.
Completeness	A measure of the amount of valid data obtained from a measurement system as compared to the planned amount, usually expressed as a percentage; also a measure of the degree to which the sampling scheme represents the available range in something, regardless of what was planned.
Detection limit	The lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability.
Quantitation limit	The level above which numerical results may be obtained with a specified degree of confidence; the minimum concentration of an analyte in a specific matrix that can be identified and quantified above the method detection limit and within specified limits of precision and bias during routine analytical operating conditions.
Method detection limit	The minimum concentration of an analyte that undergoes preparation similar to the environmental samples and can be reported with a stated level of confidence that the analyte concentration is greater than zero.
Instrument detection limit	The lowest concentration of a metal target analyte that, when directly inputted and processed on a specific analytical instrument, produces a signal/response that is statistically distinct from the signal/response arising from equipment “noise” alone.
Gas chromatography/mass spectrometry (GC/MS) instrument performance check	Performed to verify mass resolution, identification, and to some degree, instrument sensitivity. These criteria are not sample specific; conformance is determined using standard materials.
Control limits	The variation in a process data set expressed as plus/minus standard deviations from the mean, generally placed on a chart to indicate the upper and lower acceptable ranges of process data and to judge whether the process is in or out of statistical limitations.
Calibration	Compliance requirements for satisfactory instrument calibration are established to verify that the instrument is capable of producing acceptable quantitative data. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of analysis and calibration verifications document satisfactory maintenance and adjustment of the instrument on a day-to-day basis.
Relative Response Factor	A measure of the relative mass spectral response of an analyte compared to its internal standard. Relative Response Factors are determined by analysis of standards and are used in the calculation of concentrations of analytes in samples.

TABLE 4

QA/QC Term	Definition
Relative standard deviation	The standard deviation divided by the mean; a unit-free measure of variability.
Correlation coefficient	A measure of the strength of the relationship between two variables.
Relative Percent Difference	Used to compare two values; the relative percent difference is based on the mean of the two values, and is reported as an absolute value, i.e., always expressed as a positive number or zero.
Percent Difference	Used to compare two values; the percent difference indicates both the direction and the magnitude of the comparison, i.e., the percent difference may be either negative, positive, or zero.
Drift	The deviation in instrument response from its set or reference value over a period of time.
Percent Recovery	The act of determining whether or not the methodology measures all of the target analytes contained in a sample.
Blanks	Several types of blanks are analyzed by the laboratory. Corrective action procedures are implemented for blank analyses if target compounds are detected at concentrations greater than the method criteria. The criteria for evaluation of blanks apply to any blank associated with a group of samples. If problems with a blank exist, data associated with the project are evaluated to determine whether or not there is an inherent variability in the data for the project or if the problem is an isolated occurrence not affecting other data.
Reagent blank	Consists of laboratory target analyte-free water and any reagents added to a sample during analysis. This type of blank is analyzed to evaluate whether contamination occurred during the analysis of the sample due to reagent contamination. A reagent blank is usually analyzed following highly contaminated samples to assess the potential for cross-contamination during analysis.
Instrument blank	Consists of clean solvent spiked with the surrogates and analyzed on each GC column and instrument used for sample analysis by GC. This type of blank is analyzed to evaluate whether contamination occurred during the analysis of the sample due to instrument contamination.
Calibration blank	Consists of acids and reagent water used to prepare metal samples for analysis. This type of blank is analyzed to evaluate whether contamination is occurring during the preparation and analysis of the sample.
Method blank	A water or soil blank that undergoes the preparation procedures applied to a sample (i.e., extraction, digestion, clean-up). These samples are analyzed to examine whether sample preparation, clean-up, and analysis techniques result in sample contamination.
Field/equipment	Collected and submitted for laboratory analysis, where appropriate. Field/equipment blanks are handled in the same manner as environmental samples. Equipment/field blanks are analyzed to assess contamination introduced during field sampling procedures.
Trip blank	Consist of samples of analyte-free water that have undergone shipment from the sampling site to the laboratory in coolers with the environmental samples submitted for volatile organic compound (VOC) analysis. Trip blanks will be analyzed for VOCs to determine if contamination has taken place during sample handling and/or shipment. Trip blanks will be utilized at a frequency of one each per cooler sent to the laboratory for VOC analysis.

TABLE 4

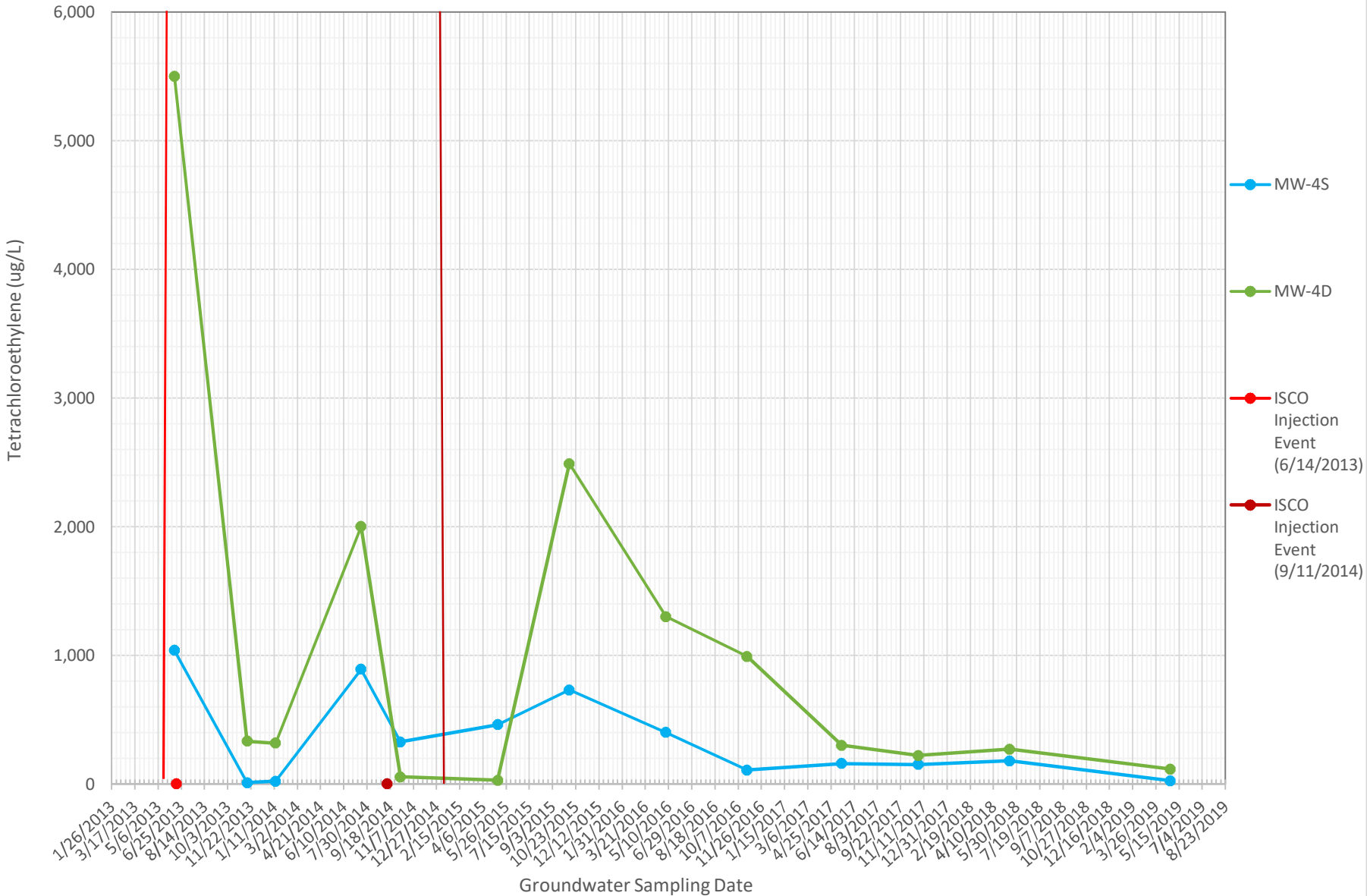
QA/QC Term	Definition
Storage blank	Consists of sample vials filled with laboratory analyte-free water. The vials are stored at the laboratory with the samples collected for VOC analysis, under the same conditions as the samples. The storage blank is analyzed with the VOC samples to evaluate for contamination due to sample storage.
Internal standards performance	Compounds not found in environmental samples which are spiked into samples and quality control samples at the time of sample preparation for organic analyses. Internal standards must meet retention time and recovery criteria specified in the analytical method. Internal standards are used as the basis for quantitation of the target analytes.
Surrogate recovery	Compounds similar in nature to the target analytes but not expected to be detected in the environmental media which are spiked into environmental samples, blanks, and quality control samples prior to sample preparation for organic analyses. Surrogates are used to evaluate analytical efficiency by measuring recovery.
Laboratory control sample Matrix spike blank analyses	Standard solutions that consist of known concentrations of the target analytes spiked into laboratory analyte-free water or sand. They are prepared or purchased from a certified manufacturer from a source independent from the calibration standards to provide an independent verification of the calibration procedure. They are prepared and analyzed following the same procedures employed for environmental sample analysis to assess method accuracy independently of sample matrix effects.
Laboratory duplicate	Two or more representative portions taken from one homogeneous sample by the analyst and analyzed in the same laboratory.
Matrix	The material of which the sample is composed or the substrate containing the analyte of interest, such as drinking water, waste water, air, soil/sediment, biological material.
Matrix Spike (MS)	An aliquot of a matrix (water or soil) fortified (spiked) with known quantities of specific target analytes and subjected to the entire analytical procedure in order to indicate the appropriateness of the method for the matrix by measuring recovery.
Matrix spike duplicate (MSD)	A second aliquot of the same matrix as the matrix spike that is spiked in order to determine the precision of the method.
Retention time	The time a target analyte is retained on a GC column before elution. The identification of a target analyte is dependent on a target compound's retention time falling within the specified retention time window established for that compound.
Relative retention time	The ratio of the retention time of a compound to that of a standard.
Resolution	The separation between peaks on a chromatogram.
Interference	An element, compound, or other matrix effect present in a sample which disturbs the detection of a target analyte leading to inaccurate concentration results for the target analyte.
Percent Moisture	An approximation of the amount of water in a soil/sediment sample made by drying an aliquot of the sample.
Raw data	The documentation generated during sampling and analysis which includes, but is not limited to, field notes, hardcopies of electronic data, disks, un-tabulated sample results, QC sample results, printouts of chromatograms, instrument outputs, and handwritten notes.

Source: O'Brien & Gere

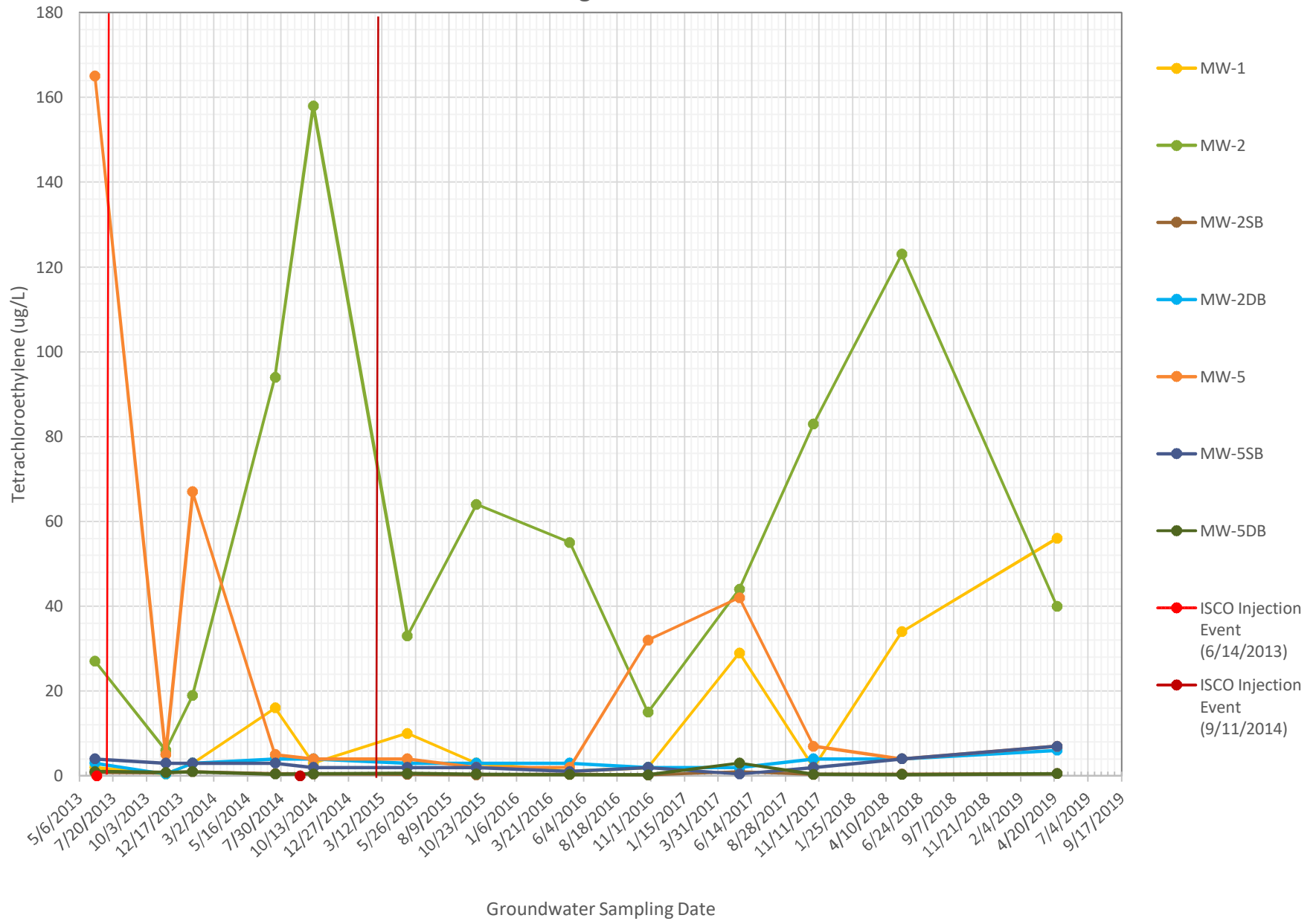


Graphical Presentation of PCE Groundwater Data

Source Area Wells



Downgradient On-site Wells



Downgradient Offsite Wells

