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# Periodic Review Report

April 30, 2020 to April 30, 2021

NYSDEC Site Number C828126

**Location:**

Volunteers of America – Back Lot Site  
214 Lake Avenue and 18 Ambrose Street  
Rochester, Monroe County, New York

**Prepared for:**

Volunteers of America of Upstate New York  
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## 1.0 EXECUTIVE SUMMARY

### 1.1 BACKGROUND AND REMEDIAL HISTORY

Bergmann is pleased to submit this Periodic Review Report (PRR) on behalf of Volunteers of America of Upstate New York, Inc. (VOA) for the VOA back lot site located at 214 Lake Avenue and 18 Ambrose Street, City of Rochester, Monroe County, New York (Site). The Site (site code C828126) is enrolled in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). Bergmann is retained by VOA for monitoring and reporting requirements in accordance with the Site Management Plan (SMP).

Based upon the results documented in the Remedial Investigation Report (RIR), dated January 4, 2012, the types of contamination at the site that were identified that required remediation included:

- Metals in overburden groundwater are the Contaminants of Concern (COC) site-wide;
- Metals and Semi-Volatile Organic Compounds (SVOCs) are the COC in historic fill materials site-wide; and
- Volatile Organic Compounds in a localized (hot spot) in an isolated area of historic fill materials.

Remedial actions completed at the site in accordance with the NYSDEC approved Alternatives Analysis Report/Remedial Action Work Plan (April 4, 2016) and the NYSDEC Decision Document (Mach 31, 2016) include the following cleanup tasks.

- Site clearing/grubbing, waste characterization, landfill approvals, excavation and transportation for disposal of source area (hot spot) contaminated soils, backfilling the source area excavation, installation of the storm water management system from May 2016 through mid-June 2016.
- Site grading, construction of Site cover system (excluding Haidt Place), installation of fencing, and sealing of cracks in existing roadway and parking areas from mid-June through September 2016.
- Excavation of soil/fill material along the right-of-way of Haidt Place and the installation of a cover system from March through September 2017.
- Prepared a Final Engineering Report (FER) that documents the cleanup and a SMP for long term management of remaining contamination as required by the Environmental Easement;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site;
- Periodic certification of the institutional and engineering controls (on-going); and,
- Implementation of a long-term groundwater monitoring plan (on-going).

The site was remediated under the New York State Brownfield Cleanup Program (NYS BCP) administered by the NYSDEC as presented in the approved Final Engineering Report (FER) and Site Management Plan (SMP) dated, December 28, 2017. A SMP was prepared for the Site for long-term management of remaining contamination as required by the Environmental Easement. In accordance with the SMP and the requirements in NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010, and the guidelines provided by NYSDEC the following required work detailed in the SMP was completed during the reporting period from April 30, 2020 through April 30, 2021.



- an annual inspection was conducted of all Engineering controls (EC) and Institutional controls (IC) with reporting on January 14, 2020.
- Annual groundwater monitoring and reporting of sample results from site monitoring wells was completed as one (1) groundwater sampling event during 2020 in accordance with NYSDEC letter dated June 3, 2020 that allows for sample frequency reduction from quarterly to annual for a two (2) year duration. The groundwater laboratory data package was also allowed to be changed from Category B to Category A. The Site Management Plan Cover page was modified to reflect these changes. Field work for annual groundwater monitoring and sampling for 2020 was completed on June 11, 2020.
- Annual groundwater monitoring and sampling is scheduled for June 2021.

## 1.2 EFFECTIVENESS OF THE REMEDIAL PROGRAM

Progress made during the reporting period toward meeting the remedial objectives for the site include continued monitoring of groundwater and maintenance of the institutional and engineering controls in accordance with the SMP. Monitoring data from the work completed to date shows that the remedial program is currently meeting the remedial objectives for the Site during the last two and a half (2.5) years. Monitoring data includes two (2) years with eight (8) quarterly groundwater monitoring events during 2018 and 2019 as well as one completed annual groundwater monitoring during June 2020 that covers a six month duration (December 2019 to June 2020).

## 1.3 COMPLIANCE

Areas and conditions of the Site were not identified as being currently out of compliance with the SMP requirements. The requirements dictated in the SMP regarding IC/EC's and the Monitoring Plan were met during the reporting period. The repairs to the cover system during 2019 did not compromise the integrity of the protectiveness of this EC. Repairs presented in the Annual Maintenance Inspection Report should be made before the end of 2021 to ensure continued integrity of the cover system.

## 1.4 RECOMMENDATIONS

Residual impacts to groundwater quality at the Site are considered low in concentration and has been documented in 2018, 2019, and 2020 post-remediation groundwater samples to remain consistent or decreasing over time. It is recommended that groundwater monitoring activities continue during 2021 during the annual groundwater monitoring event scheduled for the week of June 13, 2021.

Sealing repairs to limited areas of the Type 2 cover system are required during 2021 based on the results of the annual EC/IC inspection. The area of Type 2 cover system was installed in 1998 and is the roadway along Haidt Place that runs north south behind the VOA Children's Center. Monitoring well MW-101 needs repair for the concrete surface seal and steel well box.

## 2.0 SITE OVERVIEW

VOA entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC on June 15, 2005, to investigate and remediate a 3.055-acre property located at 18 Ambrose Street (214 Lake Avenue Rear Lot), City of Rochester, Monroe County, New York (Site). The property was remediated to enable restricted-residential use. The BCA was amended on May 31, 2016 and September 27, 2017. The Site is in the City of Rochester, County of Monroe, New York and is identified as Tax Lot #105.60-2-59.003 (18 Ambrose Street) on the City of Rochester Tax Map, which





constitutes 1.997 acres and comprises two-thirds of the Site. A portion of Tax Lot #105.60-2-1.002 (214 Lake Avenue), which constitutes 1.058 acres is the balance one-third of the Site. The Site is 3.055-acre area bounded by commercial properties (contractor's yard) to the north Ambrose Street to the south, a contractor's yard to the east and beyond is the Genesee River Gorge. The VOA Human Service Complex property adjoins the Site to the west (see Figure 1 – Well Location Map). The boundaries of the Site are depicted on Figure 1.

The majority of the Site is located at 18 Ambrose Street, west of the former Raeco Oil Superfund Site, and south of a contractor's equipment storage yard, associated building, and a Monroe County right-of-way to the Pure Waters Tunnel Structure 41. The Site is comprised of portions of two (2) tax parcels of land, which are referred to as the eastern portion of Parcel A and all of Parcel B. The majority of the Site is largely undeveloped, and the western portion of the Site is improved with parking lot area and roadway.

The Site was at one time the southernmost portion of RG&E's approximately 20-plus-acre parcel known as the Ambrose Street or Lake Avenue Coal Yard. Part of former Ambrose Street Coal Yard that is currently, VOA's property was used for surface coal storage from approximately 1918 through the mid-1960's. Subsequent to the use of the property for coal storage, the northeast portion of the Site was used by automobile dealerships from at least 1971 through 1997 for parking/storage of vehicles. Kaplan Container, a drum cleaning company, was also present on this portion of the Site. Prior to 1918, portions of the property had residential structures, which appear to have been demolished on Site into a large deep ravine, which traverses approximately through the middle of the Site, from South to North. This large ravine was historically filled. Railroad tracks were then constructed on top of the historic fill to allow for the transport of coal from existing stockpiles.

Potential contaminants of concern (COC) at the site include metals and SVOCs based on the Remedial Investigation Report (RIR). Volatile Organic Compounds (VOCs) are also included as a COC based on the past presence of levels of VOCs on the off-site VOA Human Services Complex at 214 Lake Avenue. A bedrock groundwater investigation was included as part of the RI scope of work to confirm that off-site VOCs in groundwater had not impacted the Site's groundwater at levels that would require remediation. Low levels of VOCs have been detected in limited groundwater samples in Site monitoring wells. The primary COCs identified in Site media include heavy metals and SVOCs in soil and groundwater systems.

Elevated levels of heavy metal concentrations have been detected Site-wide in samples from the overburden groundwater and to a lesser extent in the bedrock groundwater. The overlying historic fill soils are the source of metals at the Site. Groundwater monitoring of the low-level impacts for metals in groundwater at the Site is part of the selected remedial alternative. The physical impacts to groundwater are partially suppressed by the cover system and storm water management sewer systems, which reduce the infiltration of surface water runoff into the subsurface at the Site, thus reducing further impacts to groundwater. Engineering Controls (EC), along with Institutional Controls (ICs) and Environmental Easements (EE), detailed in the SMP, are implemented to provide protection of human health and the environment. Groundwater quality will be monitored during a five (5) year period on Quarterly basis to evaluate the groundwater quality and groundwater flow direction for the duration of the post-remediation period. After the results of 2-years of groundwater monitoring are completed the duration of the 5-year period of Quarterly monitoring will be petitioned for reduction, pending NYSDEC approval. The methods and procedures for post-remediation groundwater monitoring are detailed in the SMP.



### 3.0 EVALUATE REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

It appears that the levels and types of metals detected during the 2009 RI event have been substantially reduced based on 3-years of post-remediation groundwater monitoring. This trend of reduction of metals is documented in the 2020 annual monitoring report that was submitted to NYSDEC. Results for post-remediation groundwater monitoring during from 2018 through 2020 indicates a substantial reduction for heavy metals (RCRA 8 Metals) below groundwater standards in groundwater quality as compared to the 2009 RI event elevated levels as noted below.

	Range of RCRA 8 Metals Levels 2009 RI Event	Range of levels at end of 2018	Range of levels at end of 2019	Range of levels at end of 2020	703.5 GA Groundwater Standards
Arsenic	13.5 ppb to 160 ppb	Non-detect (ND)	ND	ND to 12.2 ppb	25 ppb
Barium	320 ppb to 1,840 ppb	ND to 131 ppb	ND to 277 ppb	ND to 484 ppb	1,000 ppb
Cadmium	5.6 ppb to 6.2 ppb	ND	ND to 10.8 ppb	ND	5 ppb
Chromium	21.5 ppb to 319 ppb	ND	ND	ND to 34.4 ppb	50 ppb
Lead	5 ppb to 6,600 ppb	ND to 11.9 ppb	ND to 55.4 ppb	13.5 to 38.5 ppb	25 ppb
Mercury	0.93 ppb to 193 ppb	ND	ND to 0.363 ppb	0.117 to 0.313 ppb	0.7 ppb
Selenium	6 ppb to 21.8 ppb	ND to 10.9 ppb	ND	ND	10 ppb
Silver	2.4 ppb to 16 ppb	ND	ND	ND to 5.13 J	50 ppb

In addition to the reduction of heavy metals from 2009 levels the following trends for 2020 groundwater quality results support the performance and effectiveness of the remedy:

- Trend for periodic low levels and lack of frequency of detections of SVOCs with concentrations below 703.5 groundwater quality standards or at levels that slightly exceed the standards;
- Low levels of VOCs previously detected in groundwater samples during the RI event have been reduced to levels that are non-detect (ND) or low levels below 2009 RI event levels and NYSDEC groundwater standards;
- Levels of iron, manganese, and sodium are metals that exceeds groundwater standards with concentrations that were reduced from elevated 2009 RI event levels;
- Low levels of lead slightly exceed groundwater standards in limited samples and are significantly reduced from elevated 2006 RI event levels; and
- Groundwater quality results indicate the effectiveness of the cover system and storm water management sewer system that suppress impacts to groundwater by reducing infiltration of surface water runoff into the subsurface at the Site, thus reducing further impacts to groundwater.

The results of the 2021 Annual Engineering IC/EC Inspection certifies that the condition of the EC (cover system) and IC meets the objectives of the remedy for protectiveness of human health in the environment. Continued implementation of the IC, EC and EE detailed in the SMP provides protection of human health and the environment.



## 4.0 IC/EC COMPLIANCE

### 4.1 INSTITUTIONAL CONTROLS

The IC boundaries are the same as the BCP Site boundaries as shown on Figure 1. The following IC are included in the SMP for the Site:

- The property may be used for restricted-residential, commercial, or industrial uses;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Monroe County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;
- Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easements.
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries (entire Site) noted on Figure 1. Areas of soil vapor concern and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the site are prohibited.

The site-wide inspection in 2021 determined that IC have been complied with including compliance with the EE and the SMP. There are no new conclusions or recommendations for change of IC at this time, see Annual Inspection Report for IC/EC in Appendix 1 – Annual Inspection Report. The NYSDEC IC/EC certification form is presented in Appendix 2 – NYSDEC IC/EC Certification Form.

### 4.2 ENGINEERING CONTROLS

The EC at the site is the site-wide cover system. The cover system is a permanent EC and the quality and integrity of this system will be maintained and inspected in accordance with maintenance items in the Maintenance Plan and defined inspection intervals in accordance with the SMP in perpetuity. The EC is in compliance based on the 2021 Annual Inspection Report of IC/EC presented in Appendix 1 and EC/IC are certified, see Appendix 2.



## 5.0 MONITORING PLAN COMPLIANCE

### 5.1 MONITORING PLAN COMPONENTS

Monitoring and laboratory analyses were completed in accordance with the SMP. A summary of the routine monitoring and analyses is provided in the table below

Monitoring Program	Frequency	Monitored	Matrix	Analysis
Groundwater	Annual through 2021 as approved by NYSDEC and NYSDOH (June 3, 2020)	MWR-101, MW-101, MWR-102, MW-102, MW-103, MW-105, MW-106, and MW-107	Groundwater	TCL VOCs & SVOCs, TAL Metals
Site Cover / Property Use	Annually until otherwise approved by NYSDEC and NYSDOH	Inspection of Site Cover Condition, Property Use and Environmental Easements	Not Applicable	Not Applicable

### 5.2 GROUNDWATER MONITORING DATA

Groundwater monitoring was performed annually during the reporting period using low flow sampling methodology in accordance with the SMP. Previously, post-remediation groundwater sampling included eight (8) rounds of sampling and reporting to NYSDEC from 2018 and 2019 in addition to the original two (2) rounds of sampling included in the FER. The post-remediation 2020 annual groundwater sampling event (initial annual event) during the reporting period was completed in June 2020 on the following date:

- June 11, 2020 – Report submitted to NYSDEC

### 5.3 WELL MAINTENANCE

Bergmann performs annual groundwater sampling at the Site as required in the SMP. In 2020, the existing monitoring wells were accessible for the annual sampling event. Monitoring and sampling at the Site are ongoing in accordance with the Site Management Plan (SMP). The integrity of the monitoring wells at the Site do not appear to be compromised. Monitoring wells in the sampling network appear to be in good condition based on observations during the annual field sampling. It is noted that the concrete surface seal was observed to be cracked on the surface of MW-101 and the steel well box is damaged. However, the cracked surface seal/damaged steel well box does not appear to impact water quality in this well. The surface seal/steel well box is recommended for replacement in the 2021 calendar year, see recommendations in Appendix 1. Groundwater monitoring well conditions and field observations are summarized in the table below.

Well Number	Type of Well	Location of Well	Annual Sampling
MW-101	Overburden	Down - gradient	Cracked Surface Seal/damaged well box
MW-101R	Bedrock	Down - gradient	Good



Well Number	Type of Well	Location of Well	Annual Sampling
MW-102	Overburden	Cross - gradient	Good
MW-102R	Overburden	Down - gradient	Good
MW-103	Overburden	Down - gradient	Good
MW-105	Overburden	Up - gradient	Good
MW-106	Bedrock	Up - gradient	Good
MW-107	Overburden	Cross - gradient	Good

## 5.4 GROUNDWATER FIELD MONITORING AND SAMPLING ACTIVITIES

Groundwater measurements and sampling activities were conducted in accordance with Section 4.0 of the SMP. The depths to groundwater for monitoring wells are measured and recorded on a quarterly basis to track site-wide changes in the water table elevation. The sample collection procedures were generally consistent with Section 4.4.1 in the SMP. Groundwater was purged from the wells using a low flow pump and sample collection. Water was pumped into a flow-through stabilization chamber to collect field readings for pH, temperature, specific conductance, dissolved oxygen (DO), oxidation reduction potential (ORP), turbidity, pH, and temperature parameters. Wells were purged until field readings for groundwater quality indicator parameters stabilized for at least three (3) consecutive readings for the following parameters;

- Water Level Drawdown <0.3 feet
- Temperature - +/- 3%
- pH - +/- 0.1 unit
- Dissolved Oxygen - +/-10%
- Specific Conductance - +/-3%
- Turbidity - +/-10% for values greater than 1 NTU

Purge water from wells was discharged onto the asphalt cover system near each well, as detailed in the SMP. Groundwater samples for the wells were collected directly from the pump discharge line into vials and containers provided by the analytical laboratory. Samples were chemically and thermally preserved as specified by the methodology and/or laboratory and placed in a designated cooler, pre-chilled with ice. Samples were recorded on a chain-of-custody and delivered to the Paradigm Environmental Services, Inc. of Rochester, New York for analysis, an Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Duplicate samples and a trip blank were also collected during the event for quality assurance/quality control (QA/QC) purposes.

Deviations from the monitoring plan included the following items:

- Not noted.

## 5.5 SITE GROUNDWATER ELEVATIONS AND FLOW CHARACTERIZATION

The depth to water measurements in the overburden groundwater monitoring wells was measured and water table maps were calculated from elevations that present the approximate groundwater flow directions for 2020. Six (6) overburden monitoring wells were part of the current monitoring well network, as shown on Figure 1. The 2020 overburden monitoring wells monitored included six (6) monitoring wells. Depth to water measurements were



recorded during the annual monitoring event on June 11, 2020. The depth to water measurements and calculated elevations are presented in Table 1 – 2020 Groundwater Elevations Summary.

The groundwater contours generally indicate an overburden groundwater flow direction in a northeast direction in the area of the buried ravine in the central area of the Site indicated by a depression in the contour lines. The following is a summary of depth to the water table and overburden groundwater flow characterization for the June 11, 2020 sampling event.

#### **Annual 2020 Groundwater Sampling Event**

Water level data for this and previous monitoring events are summarized in Table 1 – Groundwater elevations. In general, water levels measured during the June 11, 2020 annual event were approximately 0.29 feet higher than those measured during the 2019 Fourth Quarter event (January 3, 2020). However, all measurements were generally within the range of normal anticipated seasonal fluctuation.

A Water Table Map was prepared using groundwater elevations; see Figure 2 – Water Table Map (overburden) June 11, 2020. As indicated on Figure 2, groundwater flow in the overburden groundwater table was toward the east from the west side of the Site and towards the west from the east side of the Site. It also appears that there is a northern flow component within the former ravine. The controlling subsurface feature is the former filled ravine that is located below the central area of the Site. The configuration of the groundwater contours is similar to the configuration presented in the 2018 and 2019 Quarterly events and RI Figure 6 located in the figure section of this report.

## **6.0 MONITORING WELL GROUNDWATER ANALYSIS SUMMARY**

Groundwater analytical sample results from each monitoring well are compared to NYSDEC 703.5 Class GA groundwater standards and to concentrations from the July 2009 RI event, presented in Appendix 3 – RI Summary Tables for Groundwater Sample Results. Groundwater analytical laboratory reports are presented in Appendix 4 - Laboratory Results. These results are summarized below for each of the 2020 annual monitoring events as follows:

#### **2020 Annual Groundwater Analytical Summary**

Laboratory results for the groundwater samples analyzed are summarized below for Metals and SVOCs that are COCs. VOCs were also analyzed and summarized in the following section. The results by monitoring well are compared to NYSDEC 703.5 groundwater standards and to concentrations from the RI and Fourth Quarter 2019 event.

##### ***Metals***

The 2020 results for metals are similar in comparison to the 2019 Fourth Quarter event as noted below for samples from each monitoring well as summarized in Table 2 – Groundwater Sample Analysis Summary – Metals.

##### ***MW-101***

The June 11, 2020 results are compared to the previous results from January 3, 2020. Levels of metals indicate some increases in concentrations. Manganese with a concentration of 725 ppb increased from 577 ppb in the Fourth Quarter 2019 sampling event. The Manganese concentration exceeded the groundwater standard of 300 ppb. Sodium with a concentration of 176,000 ppb increased from 149,000 ppb in the Fourth Quarter 2019 sampling event. This sodium concentration exceeds the groundwater standard of 20,000 ppb.



Iron with a concentration of 11,810 increased from 8,910 ppb in the Fourth Quarter sample event and exceeds the groundwater standard of 300 ppb. Lead concentration remained the same as the Fourth Quarter 2019 at ND and is below the groundwater standard of 25 ppb. Mercury concentration remained the same as the Fourth Quarter 2019 at ND and is below the groundwater standard of 0.7 ppb. Results for other metals are below groundwater standards.

The 2020 Annual Groundwater Sampling event marks (8) quarters (2-years) and one (1) annual event of groundwater monitoring for a total of two and a half (2.5) years of post-remediation groundwater monitoring. In summary, metals concentrations are lower than the 2009 RI event, except for Sodium. Levels of Iron, Manganese, and Sodium exceed the groundwater standards, see Table 2.

#### ***MWR-101***

Results from MWR-101 indicate an increase of Iron from 984 ppb in the Fourth Quarter event to 1,026 ppm. The Iron concentration exceeds the groundwater standard of 300 ppb. The level of Lead increased from ND to 13.5 and is below the groundwater standard of 25 ppb. The level of Manganese increased from 12.3J ppb in the Fourth Quarter event to 15.8 ppb in the 2020 Annual event and remained below the standard of 300 ppb. The level of Selenium remained at ND. The level of Sodium exceeds the standard of 20,000 ppb and decreased from 878,000 ppb to 158,000 ppb for this event. In general, 2020 Annual monitoring levels are lower than detected during the 2009 RI event. The types of metals detected has also decreased as compared to the 2009 RI event.

In summary, metals concentrations are lower than the 2009 RI event, except for Sodium. The level of Sodium exceeded the groundwater standard, see Table 2.

#### ***MW-102***

Results from MW-102 indicate a decrease of Barium from 696 ppb in the Fourth Quarter to 484 ppb. This level of Barium is below the standard of 1,000 ppb. The level of Iron decreased from 21,100 ppb to 10,900 ppb which exceeds the standard of 300 ppb. Lead remained the same at ND in the annual event and is below the standard of 25 ppb. The levels of Manganese increased from 1,250 ppb to 1,730 ppb which exceeds the standard of 300 ppb. The levels of Selenium remained ND. The level of Sodium exceeds the standard of 20,000 ppb and decreased from 878,000 ppb to 580,000 ppb for this event. Overall, levels of metals detected have decreased from the 2019 Fourth Quarter event and are significantly below levels detected during the 2009 RI event.

In summary, metals concentrations are lower than the 2009 RI event, except for the following metals: Calcium, Magnesium and Sodium. Levels of Iron, Manganese, and Sodium exceed the groundwater standards, see Table 2.

#### ***MWR-102***

Levels of metals indicate an overall slight increase in concentrations. The level of Manganese decreased from 161 ppb to 102 ppb for this event and is below the groundwater standard of 300 ppb. The level of Selenium remained unchanged at ND and is below the standard of 10 ppb. Iron increased from ND to 1,910 ppb and exceeds the standard of 300 ppb. The level of Sodium decreased from 290,000 ppb to 375,000 ppb for this event and exceeds the standard of 20,000 ppb. Results for other metals have been are below groundwater standards. Overall, levels of metals detected decreased and are in the range of levels detected during the 2009 RI event.





In summary, metals concentrations are lower than the 2009 RI event, except for the following metals: Calcium, Magnesium, Manganese, Mercury, and Sodium. The levels of Iron and Sodium exceeded the groundwater standards, see Table 2.

#### ***MW-103***

Levels of metals increased in concentrations. The level of Iron in this event decreased from 9,350 ppb to 1,260 ppb and exceeded the groundwater standard of 300 ppb. Manganese increased from 470 ppb to 534 ppb and exceeded the groundwater standard of 300 ppb. Sodium increased with a concentration of 181,000 ppb to 227,000 ppb in this event exceeds the standard of 20,000 ppb. Iron, Manganese, and Sodium levels exceeds the groundwater standard of 20,000 ppb. Results for other metals are below groundwater standards.

In summary, metals concentrations are lower than the 2009 RI event, except for Sodium. The levels of Iron, Manganese and Sodium exceeded the groundwater standards, see Table 2.

#### ***MW-105***

Results indicate that Iron decrease from 13,000 in the Fourth Quarter sampling event to ND in this event and this level is below the groundwater standard of 300 ppb. The level of Lead slightly decreased from 13.6 ppb to ND and is below the groundwater standard of 25 ppb. Manganese decreased from 236 ppb to 44.2 ppb in this event and is below the groundwater standard of 300 ppb. The level of Selenium remained unchanged at ND and is below the standard of 10 ppb. The level of Sodium increased from 78,700 ppb to 93,640 ppb and exceeds the groundwater standard of 20,000 ppb. Overall, the levels of metals decreased during this event and are significantly lower compared to the 2009 RI event. The level of Sodium is in the same range as the 2009 RI event. The types of metals detected has also decreased as compared to the 2009 RI event.

In summary, metals concentrations are lower than the 2009 RI event, except for Sodium. The level of Sodium exceeded the groundwater standards, see Table 2.

#### ***MW-106***

Results indicate an increase of Iron from 6,310 ppb to 6,530 ppb for this event that exceeds the standard of 300 ppb. The level of Lead decreased from 55.4 ppb to 38.5 ppb and exceeded the groundwater standard of 25 ppb. Mercury slightly decreased from 0.363 ppb to 0.274 ppb and is below the groundwater standard of 0.7 ppb. The level of Manganese slight increase from 403 ppb to 472 ppb. The level of Selenium remained unchanged at ND that is below the standard of 10 ppb. The level of Sodium increased from 120,000 ppb to 181,000 ppb for this event that exceeds the standard of 20,000 ppb. Overall, the levels of metals increased during this event and are significantly lower compared to the 2009 RI event, except for sodium. The types of metals detected has also decreased as compared to the 2009 RI event. In summary, metals concentrations are lower than the 2009 RI event. The levels of Sodium exceeded the groundwater standards, see Table 2.

#### ***MW-107***

Results indicate a decrease of Iron from 4,540 ppb to 3,800 ppb that exceeds the groundwater standard of 300 ppb. Manganese a slight decrease from 397 ppb to 394 ppb in this event and exceeds the groundwater standard of 300 ppb. The level of Selenium remained at ND and is below the standard of 10 ppb. The level of Sodium increased from 63,100 ppb to 104,000 ppb for this event and exceeds the standard of 20,000 ppb. Overall, the levels of metals detected slightly decreased during this event and are significantly lower than the 2009 RI event. The types of metals detected has also decreased as compared to the 2009 RI event.





In summary, metals concentrations are lower than the 2009 RI event. The levels of Iron, Manganese and Sodium exceeded the groundwater standards, see Table 2.

### **METALS SUMMARY**

It appears that the levels and types of metals detected during the 2009 RI event have been substantially reduced based on sample results during eight (8) post-remediation quarterly groundwater monitoring events and this Annual Groundwater Monitoring event. This trend of reduction of metals is documented in the 2018 quarterly monitoring reports and 2019 quarterly monitoring reports. Overall, there was a slight increase in overall concentrations from the 2019 Fourth Quarter compared to this event.

The most toxic metals are the Resource Conservation and Recovery Act Metals (RCRA 8 Metals) that are included in the metals results for the quarterly monitoring program. Each of the RCRA 8 Metals exceeded standards during the 2009 RI event and have been substantially reduced to below standards after eight (8) quarters of post-remediation groundwater monitoring and this event. The table below presents the range for levels of RCRA 8 Metals during the 2009 RI event and current 2020 Fourth Annual Groundwater monitoring event that indicate substantial reductions with each metal below standards, except for Lead.

Range of RCRA 8 Metals Levels 2009 RI Event		Range for 2020 Annual levels	703.5 Groundwater Standard
Arsenic	13.5 ppb to 160 ppb	Non-detect (ND) to 12.2 ppb	25ppb
Barium	320 ppb to 1,840 ppb	ND to 484 ppb	1,000 ppb
Cadmium	5.6 ppb to 6.2 ppb	ND	5 ppb
Chromium	21.5 ppb to 319 ppb	ND to 34.4 ppb	50 ppb
Lead	5 ppb to 6,600 ppb	13.5 to 38.5 ppb	25 ppb
Mercury	0.93 ppb to 193 ppb	0.117 to 0.313 ppb	0.7 ppb
Selenium	6 ppb to 21.8 ppb	ND	10 ppb
Silver	2.4 ppb to 16 ppb	ND to 5.13J	50 ppb

### **Semi-Volatile Organic Compounds (SVOCs)**

#### **MW-101**

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event.

In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### **MWR-101**

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and are unchanged based on eight (8) quarterly monitoring events and one (1) annual event. Bis (2-ethylhexyl) phthalate was detected in this well during the 2009 RI event at a concentration of 4.0J ppb. Overall, the level of Bis (2-ethylhexyl) phthalate has decrease to ND, see SVOC Table 8 in Appendix 3.



In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***MW-102***

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event.

In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***MW-102R***

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event. Levels of SVOCs were ND or below standards during the RI event except for detection of Bis (2-Ethylhexyl) Phthalate at 9.0 ppb that slightly exceeded the standard of 5 ppb

In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Table 8 in Appendix 3. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***MW-103***

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event.

In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Table 8 in Appendix 3. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***MW-105***

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event.

In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***MW-106***

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event.



In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***MW-107***

SVOCs were ND during the 2020 Annual Groundwater Monitoring event and unchanged based on eight (8) quarterly monitoring events and one (1) annual event. These results indicate a reduction from low levels of estimated concentrations of SVOC's exceeding groundwater standards during the previous RI event.

In summary, SVOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3. SVOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

#### ***SVOCs SUMMARY***

In general, the low levels of SVOCs previously detected in groundwater samples during the 2009 RI event have been reduced to levels that are ND and below standards during the 2020 annual event. It appears that sporadic detections of SVOCs were detected during the RI event (see Appendix 3), and during the 2018 Second and 2018 Fourth Quarter events. These results establish a trend for periodic low levels of SVOCs below standards or at levels that slightly exceed standards. SVOCs do not appear to be a COC based on low levels and lack of frequency of detections during eight (8) quarters and one (1) annual event of post-remediation groundwater monitoring. A copy of the laboratory report for this event is presented in Appendix B. The 2009 RI event results are presented in Appendix 3.

#### ***Volatile Organic Compounds (VOCs)***

##### ***MW-101***

Results for 2020 Annual Groundwater Monitoring event were unchanged at ND. The results for VOCs during the previous RI event was ND, except for and estimated value of 2.0JB ppb of Acetone that was also detected in the VOCs trip blank.

In summary, VOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3. VOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

##### ***MWR-101***

Results for 2020 Annual Groundwater Monitoring event were ND. Levels of VOCs were ND or below standards during the RI event; see Appendix 3.

In summary, VOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3. VOCs do not appear to be a contaminant of concern (COC) in the groundwater at the Site due to lack of detections.

##### ***MW-102***

Results for 2020 Annual Groundwater Monitoring event were ND. Levels of VOCs were ND or below standards during the RI event; see Appendix 3.



In summary, VOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3.

#### ***MWR-102***

Levels of cis-1, 2-Dichloroethene decreased from 1.77J ppb (estimated value) in the 2019 Fourth Quarter to 1.27J ppb in the 2020 Annual Groundwater Monitoring event . This value is below the standard of 5 ppb. Methyl tert-butyl Ether (MTBE) decreased from 13.9 ppb in the 2019 Fourth Quarter to 10.6 ppb in the 2020 Annual Groundwater Monitoring event that slightly exceeds the standard of 10 ppb. Levels of cis-1, 2-Dichloroethene at 1.0J ppb and MTBE at 31.0 ppb were detected during the RI event; see Appendix 3.

In summary, overall, the levels of cis-1, 2-Dichloroethene and MTBE have remained the same or decreased and are sporadically detected during eight (8) quarterly monitoring events and one (1) annual event. VOCs are a secondary COC for post-remediation groundwater monitoring based on low levels and lack of frequency of detections.

#### ***MW-103***

Results for 2020 Annual Groundwater Monitoring event were ND. Levels of VOCs were ND or below standards during the RI event; see Appendix 3.

In summary, VOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3.

#### ***MW-105***

Results for 2020 Annual Groundwater Monitoring event were ND. Levels of VOCs were ND or below standards during the RI event; see Appendix 3.

In summary, VOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3.

#### ***MW-106***

Levels of Chlorobenzene decreased from 5.48 ppb for the 2019 Fourth Quarter to 4.93 ppb for the 2020 Annual Groundwater Monitoring event and this level is below the groundwater standard of 5 ppb. Levels of VOCs were ND or below standards during the RI event; see Appendix 3.

In summary, overall, the levels of Chlorobenzene have remained the same or decreased and was sporadically detected during eight (8) quarterly monitoring events and one (1) annual event. VOCs are a secondary COC for post-remediation groundwater monitoring based on low levels and lack of frequency of detections.

#### ***MW-107***

Levels of Methylene chloride remained ND for 2020 Annual Groundwater Monitoring event and is below the standard of 5 ppb. Levels of VOCs were ND or below standards during the RI event; see Appendix 3.

In summary, VOC concentrations are ND and lower than the estimated low levels detected in the 2009 RI event, see Appendix 3.

#### ***VOCs SUMMARY***

In general, the low levels of VOCs previously detected in groundwater samples during the RI event have been reduced to levels that are essentially unchanged, and or that slightly exceed groundwater standards. Periodic



detections of MTBE in samples ranging from below the groundwater standard of 10 ppb to 20.7 ppb in monitoring well MWR-102. The RI event level of MTBE was 31.0 ppb. During the 2020 Annual Groundwater Monitoring event the level was 10.6 ppb. Overall, the level of MTBE has decreased. cis-1, 2-Dichloroethene decreased from ND to 1.77J (estimated value) in MWR-102 during the Fourth Quarter. Chlorobenzene decreased from 5.48 ppb in monitoring well MW-106 for the 2019 Fourth Quarter to 1.27J ppb for 2020 Annual Groundwater Monitoring event and is consistent with periodic low level detections during eight (8) quarters and one (1) annual event of post-remediation groundwater monitoring results.

It should be noted that the majority of the VOCs detected during the RI event were estimated values and or detected in the blank samples. These results establish a trend for periodic low levels of VOCs below standards or at levels that slightly exceed standards in samples from MWR-102 and MW-106. Therefore, VOCs are a secondary COC for post-remediation groundwater monitoring based on low levels and lack of frequency of detections. A copy of the laboratory report for this event is presented in Appendix 4. The 2009 RI event results are presented in Appendix 3.

#### ***Quality Control Sample Results***

A blind duplicate sample was collected from MWR-102. This duplicate sample was MW-10 and analyzed for Metals, SVOCs and VOCs. The results for this duplicate sample are consistent with the levels detected in sample MWR-102. Matrix spike and matrix spike duplicates samples were collected from monitoring well MW-107. An aqueous trip blank sample was provided by the laboratory for VOCs analysis. The results for the trip blank sample were ND, see Appendix 4.

## **7.0 OPERATION & MAINTENANCE COMPLIANCE**

Operation and maintenance activities were completed at the Site and include inspections of the EC and some repairs to the Site fencing and maintenance of vegetation around Cover Type 1. The 2021 Annual EC/IC Inspection was completed on April 23, 2021 to assess the general condition of the Site as well as conditions of the cover system. A summary of the conditions and recommendations is provided below.

The following recommendations were noted during the Annual EC Inspection. Overall, all the EC are functional and IC in place for protection of human health and the environment. The following action items for maintenance and repairs were noted from the Annual EC inspection on April 23, 2021:

1. Make repairs to pot holes / cracks in the existing roadway Cover Type 2 installed in 1998. Asphalt patches required to match material and elevation of existing pavement surface. Crack sealer coat needs to be applied to Cover Type 2 areas (pavement roadway areas installed in 1998) where cracking has developed.
2. Remove vegetation that includes weeds and brush along the fencing of the back lot. It is recommended to manually remove vegetation in place of use of herbicides (weed killer).
3. Replace the steel well cover and concrete surface seal at monitoring well MW-101.
4. Bergmann engineer to coordinate these repairs during 2021.

Maintaining the integrity and effectiveness of the EC is based on the results of inspections when needed and the required annual inspections to provide recommendations for making repairs to the cover system as necessary to



correct the effects of weathering, settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding the cover system.

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

### 8.1 COMPLIANCE

The requirements dictated in the SMP regarding IC/EC's and the Monitoring Plan were met during the reporting period. The recommended repairs to the cover system did not compromise the integrity of the protectiveness of this EC. The repairs should be made before the end of 2021 to ensure continued integrity of the cover system.

### 8.2 PERFORMANCE AND EFFECTIVENESS OF REMEDY

An evaluation of the components of the SMP during this reporting period indicates that, as of the end date of this report, the IC/EC controls were protective of human health and the environment. Levels of COC in post-remediation groundwater samples have been significantly reduced. Implementation of the monitoring plan sufficiently complied with performance of the remedy.

### 8.3 RECOMMENDATIONS FOR FUTURE PRR

Since, residual contamination remains at the site, applicable site management requirements should be continued. However, since residual contamination at the site is considered low level and or below groundwater standards and has been documented in post-remediation groundwater samples to remain consistent or decreasing over time, it is recommended that annual groundwater monitoring activities be evaluated for potential termination based on eight (8) Quarterly monitoring results completed during 2018 and 2019, annual monitoring results during 2020 and future annual results for June 2021.

### 8.4 POTENTIAL CHANGE IN USE

There is no potential change in use planned for this Site. A future sale of the site requires a 60-Day Advance Notification of Transfer of Ownership as required by 6NYCRR Part 375-1.11(d) and 375-1.9(f).



# TABLES

TABLE 1  
Groundwater Elevations  
Post-Remediation Quarterly Groundwater Monitoring  
2020 Annual Groundwater Monitoring Event  
June 11, 2020  
Volunteers of America  
Back Lot Site No. C828126  
Rochester, New York

Well Name	Total Depth (ft)	Ref. Elev.	Depth to Water 07/27/2009	GW Elev. 07/2009	Depth to Water 6/28/2019	GW Elev. 6/28/2019	Depth to Water 10/4/2019	GW Elev. 10/4/2019	Depth to Water 1/3/2020	GW Elev. 1/3/2020	Depth to Water 6/11/2020	GW Elev. 6/11/2020
MW-101	30.0	481.89	24.48	457.41	19.74	462.15	21.49	460.40	21.01	460.88	21.71	460.18
MWR-101	54.5	481.84	24.80	457.04	21.10	460.74	21.95	459.89	21.55	460.29	21.68	460.16
MW-102	31.0	490.61	23.50	466.59	22.67	467.94	23.98	466.18	23.45	467.16	22.58	468.03
MWR-102	54.0	490.16	31.69	458.47	28.37	461.79	29.20	460.96	28.71	461.45	28.89	461.27
MW-103	44.0	486.34	43.14	443.34	36.64	449.70	39.53	446.81	39.03	447.31	37.65	448.69
MW-105	28.0	483.85	18.41	465.72	18.32	465.53	18.73	465.12	18.18	465.67	18.40	465.45
MW-106	32.0	483.53	25.58	457.59	20.56	462.97	22.49	461.04	21.98	461.55	21.65	461.88
MW-107	44.0	485.17	--	--	32.93	452.24	34.92	450.25	34.44	450.73	33.42	451.75



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TABLE 2  
Groundwater Sample Analysis Summary  
Metals  
2020 Annual Groundwater Monitoring Event  
Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

Metals Page 1 of 2	VOA MW-101 (7/27/09)	VOA MW- 101 (1/3/20) 4th Quarter 2019	VOA MW- 101 (6/11/20) Annual 2020	VOA MWR-101 (7/27/09)	VOA MWR-101 (1/3/20) 4th Quarter 2019	VOA MWR-101 (6/11/20) Annual 2020	VOA MW-102 (7/27/09)	VOA MW- 102 (1/3/20) 4th Quarter 2019	VOA MW-102 (6/11/20) Annual 2020	VOA MWR-102 (7/27/09)	VOA MW- 102 (1/3/20) 4th Quarter 2019	VOA MWR- 102 (6/11/20) Annual 2020	VOA MW- 103 (7/27/09)	VOA MW-103 (1/3/20) 4th Quarter 2019	VOA MW- 103 (6/11/20) Annual 2020	NYSDEC 703.5 Standard
Aluminum	74,700	<100ND	<100ND	120B	1,350	1,870	19,400	<100ND	<100ND	770	<100ND	96.3J	31,700	<100ND	<100ND	-
Antimony	<b>10B</b>	<60 ND	<60 ND	<60ND	<60 ND	<60 ND	0.57ND	<60ND	<60ND	<60ND	<60ND	<60ND	<b>142</b>	<60ND	<60ND	3
Arsenic	<b>144</b>	<10ND	9.32J	<10ND	<10ND	9.10J	13.5	<10ND	12.2	<10ND	<10ND	7.75J	<b>99.2</b>	<10ND	15.1	25
Barium	<b>1,840</b>	157	216	20B	<100ND	<100ND	457	696	484	60B	69.7J	71.2J	<b>1,660</b>	277	262	1,000
Beryllium	6.0	<5ND	<5ND	<5ND	<5ND	<5ND	0.84B	<5ND	<5ND	<5ND	<5ND	<5ND	3.8B	<5ND	<5ND	-
Cadmium	<b>5.6</b>	<5ND	<5ND	<5ND	<5ND	<5ND	0.50B	<5ND	<5ND	<5ND	<5ND	<5ND	4.7B	<5ND	<5ND	5
Calcium	381,000	144,000	180,000	222,000	18,300	5,540	269,000	543,000	698,000	24,100	106,000	86,800	368,000	180,000	182,000	-
Chromium	<b>229</b>	<10ND	<10ND	<10ND	<10ND	<10ND	25.1	<10ND	<10ND	4B	<10ND	<10ND	<b>121</b>	<10ND	34.4	50
Cobalt	60	<50ND	<50ND	<50ND	<50ND	<50ND	5.0B	<50ND	<50ND	50ND	<50ND	<50ND	35.7B	<50ND	<50ND	-
Copper	<b>2,050</b>	<20ND	<20ND	5B	<40ND	<40ND	55.6	<40ND	<40ND	8B	<40ND	<40ND	<b>8,840</b>	<20ND	<20ND	200
Iron	<b>140,000</b>	<b>8,910</b>	<b>11,810</b>	220	<b>984</b>	<b>1,026</b>	<b>50,900</b>	<b>26,100</b>	<b>10,900</b>	<b>1,300</b>	<100ND	<b>1,410</b>	<b>80,500</b>	<b>9,350</b>	<b>1,260</b>	300
Lead	<b>14,100</b>	<10ND	<10ND	5B	<10ND	13.5	<b>109</b>	<10ND	<10ND	8B	<10ND	<10ND	<b>6,600</b>	<10ND	<10ND	25
Magnesium	152,000	34,800	43,400	88,800	3,890	<25ND	107,000	134,000	185,000	3,600B	66,100	43,600	84,300	39,000	37,800	-
Manganese	<b>3,840</b>	<b>577</b>	<b>725</b>	78	12.3J	15.8	<b>1,120</b>	<b>1,250</b>	<b>1,730</b>	14B	161	102	<b>1,060</b>	<b>470</b>	<b>534</b>	300
Mercury	<b>1.87</b>	<0.2ND	<0.2ND	0.20B	<0.2ND	0.313	<b>0.93</b>	<0.20ND	<0.20ND	0.02B	<0.2ND	0.117	<b>193</b>	<0.2ND	<0.2ND	0.7
Nickel	<b>132</b>	<40ND	<40ND	<40ND	<40ND	<40ND	13.8B	<40ND	<40ND	<40ND	<40ND	<40ND	<b>155</b>	<20ND	<20ND	100
Potassium	23,000	8,700	10,300	12,400	2,470J	1,470J	33,700	42,800	55,400	4,200B	9,710	10,400	18,000	10,200	11,700	-
Selenium	<b>11B</b>	<20ND	<20ND	6B	<20ND	<20ND	1.5ND	<20ND	<20ND	35ND	<20ND	<20ND	<b>11.4B</b>	<20ND	<20ND	10
Silver	16	<10ND	<10ND	<10ND	<10ND	<10ND	2.4B	<10ND	5.13J	<10ND	<10ND	<10ND	12.9	<10ND	<10ND	50
Sodium	<b>125,000</b>	<b>155,000</b>	<b>176,000</b>	<b>336,000</b>	<b>878,000</b>	<b>158,000</b>	<b>499,000</b>	<b>1,860,000</b>	<b>1,580,000</b>	<b>102,000</b>	<b>290,000</b>	<b>375,000</b>	<b>188,000</b>	<b>181,000</b>	<b>227,000</b>	20,000
Thallium	25ND	<25ND	<25ND	<25ND	<25ND	<25ND	1.3ND	54.5	17.1J	25ND	<25ND	<25ND	1.3ND	<25ND	<25ND	-
Vanadium	252	<25ND	<25ND	50B	<25ND	<25ND	23.3B	<25ND	<25ND	50B	<25ND	<25ND	125	<25ND	<25ND	-
Zinc	3,080	<60ND	<60ND	143	61.8	43.4	98.8	37.5	<60ND	915	<60ND	<60ND	4,070	38.9J	38.9J	-

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, J = metal is estimated, - = No standard, E = results estimated. **Concentration in bold type indicates detection above New York State Department of Environmental Conservation 703.5 groundwater standards.**
2. Concentrations of metals are expressed in parts per billion (ppb) equivalent to ug/l.
3. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009 (Remedial Investigation) analyzed by Columbia Analytical Services, Rochester, New York (ELAP ID # 10145).
4. Samples collected by Bergmann on January 3, 2020 and June 11, 2020 and analyzed by Paradigm Environmental Services, Inc. Rochester, New York (ELAP ID # 10958).
5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.
6. Results shown for July 2009 are from the Remedial Investigation.



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TABLE 2  
Groundwater Sample Analysis Summary  
Metals  
2020 Annual Groundwater Monitoring Event  
Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

Metals Page 2 of 2	VOA MW-105 (7/27/09)	VOA MW-105 (1/3/20) 4th Quarter 2019	VOA MW-105 (6/11/20) Annual 2020	VOA MW-106 (7/27/09)	VOA MW-106 (1/3/19) 4th Quarter 2019	VOA MW-106 (6/11/20) Annual 2020	VOA MW-107 (7/27/09)	VOA MW-107 (1/3/20) 4th Quarter 2019	VOA MW-107 (6/11/20) Annual 2020	NYSDEC 703.5 Groundwater Standards
Aluminum	170,000	9,270	<100 ND	36,900	2,780	2,590	52,100	<100 ND	<100 ND	-
Antimony	<60 ND	<60 ND	<60 ND	9B	<60 ND	<60 ND	<b>154</b>	<60 ND	<60 ND	3
Arsenic	<b>102</b>	<10 ND	<10 ND	<b>44</b>	<10 ND	8.44J	<b>160</b>	<10 ND	7.27J	25
Barium	320	<100 ND	<100 ND	790	187	192	<b>1,370J</b>	111	121	1,000
Beryllium	8.9	<5 ND	<5 ND	1.6B	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	-
Cadmium	3.7B	<5 ND	<5 ND	4.5B	<5 ND	<5 ND	<b>6.2</b>	<5 ND	<5 ND	5
Calcium	1,820,000	178,000	115,000	229,000	118,000	153,000	393,000	254,000	279,000	-
Chromium	<b>177</b>	10.8	<10 ND	<b>118</b>	5.11J	<10 ND	<b>319</b>	<10 ND	<10 ND	50
Cobalt	74	<50 ND	<50 ND	19B	<50 ND	<50 ND	<50 ND	<50 ND	<50 ND	-
Copper	<b>204</b>	<40 ND	<40 ND	<b>1,040</b>	25.3	<20 ND	<b>1,360</b>	<40 ND	<40 ND	200
Iron	<b>210,000</b>	<b>13,000</b>	<100 ND	<b>60,000</b>	<b>6,310</b>	<b>6,530</b>	<b>127,000</b>	<b>4,540</b>	<b>3,800</b>	300
Lead	<b>327</b>	13.6	<100 ND	<b>2,010</b>	<b>55.4</b>	<b>38.5</b>	<b>4,230</b>	<10ND	<10ND	25
Magnesium	761,000	128,000	107,000	76,000	31,900	29,200	101,000	40,500	44,500	-
Manganese	<b>3,810</b>	236	44.2	<b>1,690</b>	<b>403</b>	<b>472</b>	<b>1,920</b>	<b>397</b>	<b>394</b>	300
Mercury	<0.20ND	<0.20 ND	<0.20 ND	<b>1.24</b>	0.363	0.274	<b>29.2</b>	<0.2ND	<0.2ND	0.7
Nickel	<b>171</b>	<40 ND	<40 ND	57	<40 ND	<40 ND	<b>209</b>	<40 ND	<40 ND	100
Potassium	83,500	13,200	9,640	23,200	9,630	9,630	20,200J	8,280	9,610	-
Selenium	<20ND	<20ND	<20ND	12B	<20ND	<20ND	<b>21.8</b>	<20ND	<20ND	10
Silver	<10 ND	<10 ND	<10 ND	<10 ND	<10 ND	<10 ND	<10 ND	<10 ND	<10 ND	50
Sodium	<b>58,700</b>	<b>78,700</b>	<b>93,640</b>	<b>351,000</b>	<b>120,000</b>	<b>181,000</b>	<b>178,000</b>	<b>66,300</b>	<b>104,000</b>	20,000
Thallium	<25 ND	<25 ND	<25 ND	<25 ND	<25 ND	<25 ND	<25 ND	<25 ND	<25 ND	-
Vanadium	180	13.7J	13.7J	81	<25 ND	<25 ND	161	<25 ND	<25 ND	-
Zinc	163	138	<60 ND	1,500	133	74.8	3,420	33.8J	<60 ND	-

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, J = metal is estimated, - = No standard, M = Matrix spike recoveries outside QC limits. **Concentration in bold type indicates detection above New York State Department of Environmental Conservation 703.5 groundwater standards.**
2. Concentrations of metals are expressed in parts per billion (ppb) equivalent to ug/l.
3. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009 (Remedial Investigation) and analyzed by Columbia Analytical Services, Rochester, New York (ELAP ID # 10145).
4. Samples collected by Bergmann on January 3, 2020 and June 11, 2020 and analyzed by Paradigm Environmental Services, Inc. Rochester, New York (ELAP ID # 10958).
5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



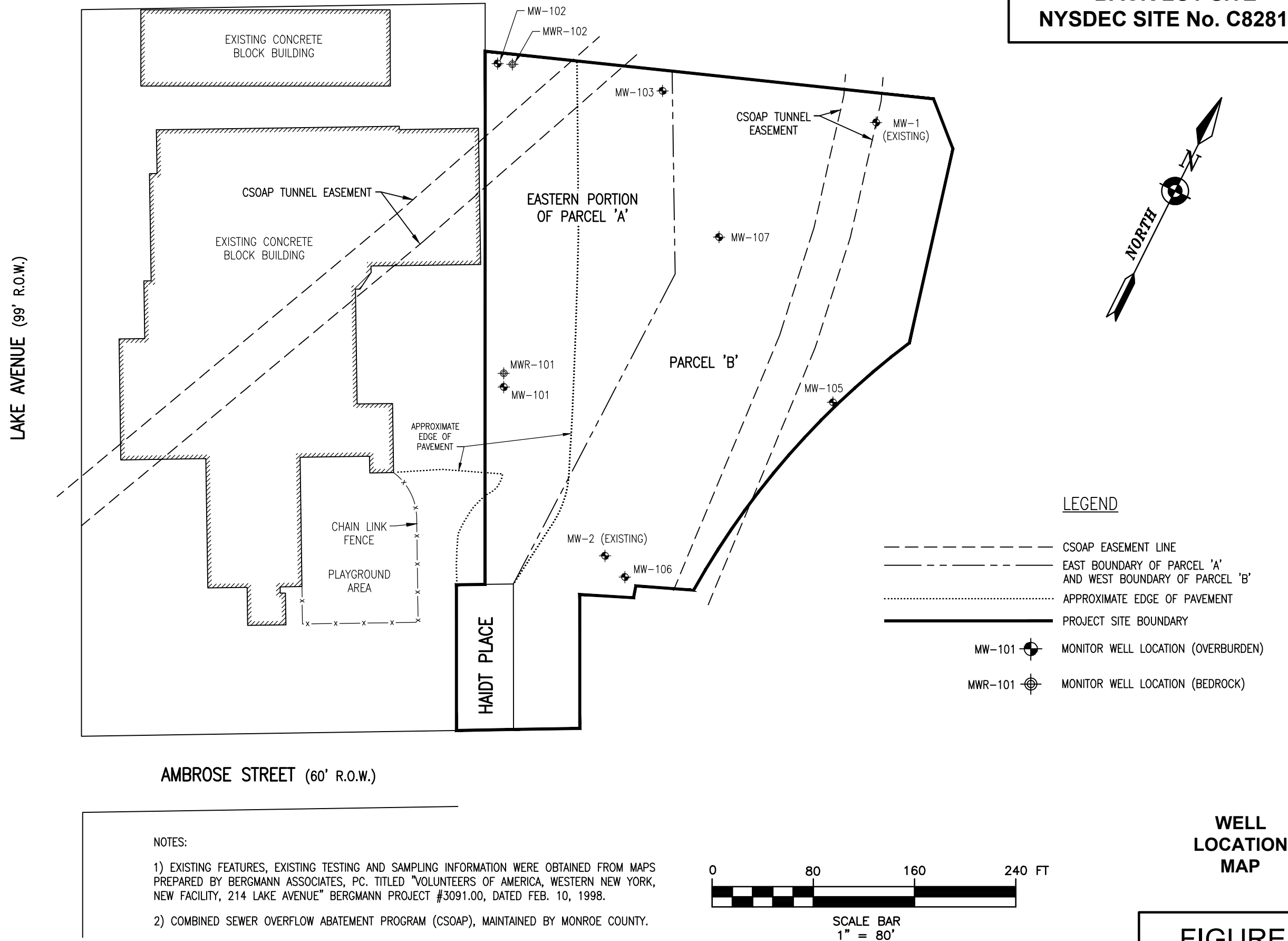
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## FIGURES

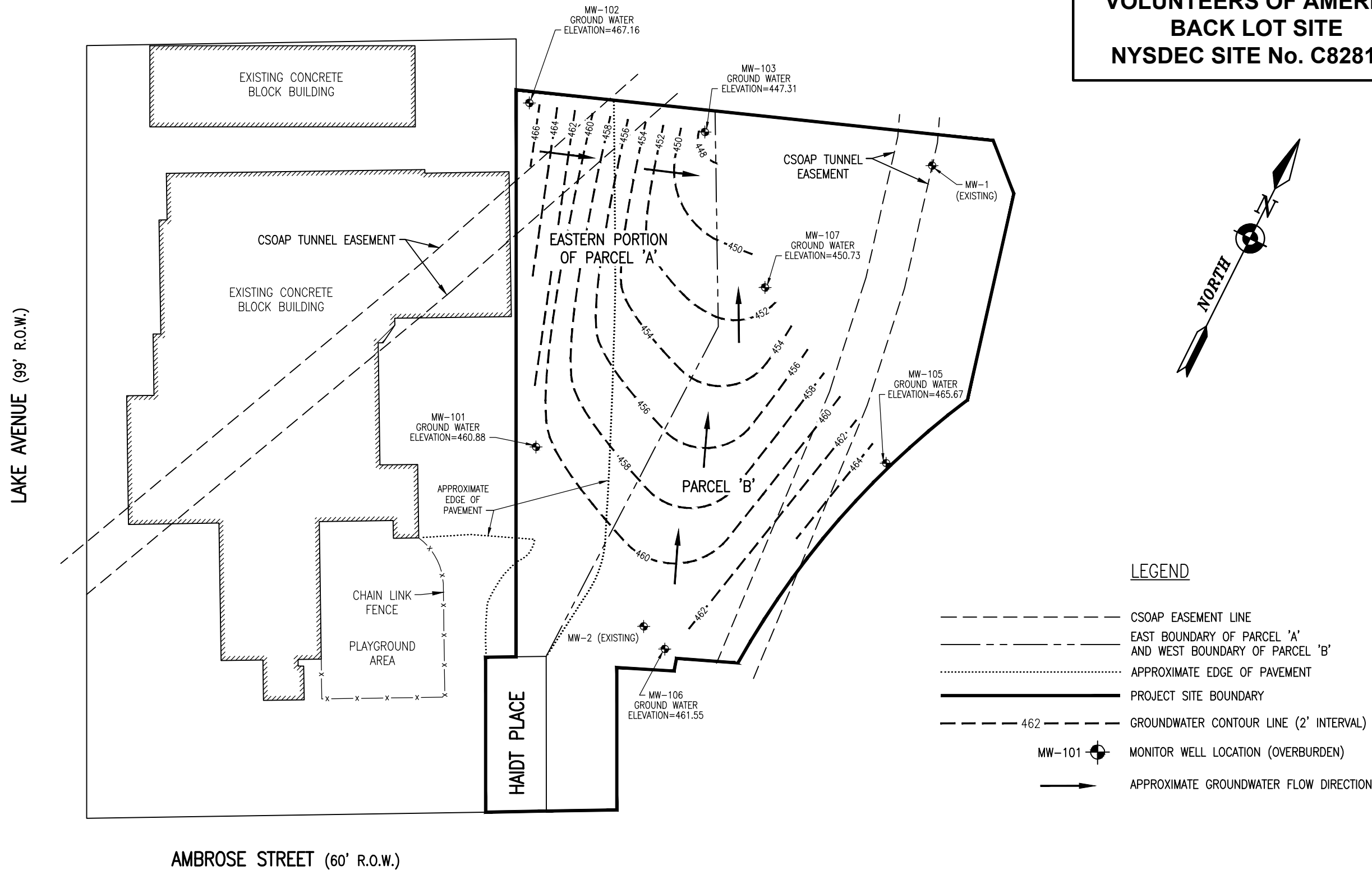


**BERGMANN  
ASSOCIATES**

Bergmann Associates, Architects, Engineers,  
Landscape Architects & Surveyors, D.P.C.

280 East Broad Street  
Suite 200  
Rochester, New York 14604  
office: 585.232.5135  
fax: 585.232.4652  
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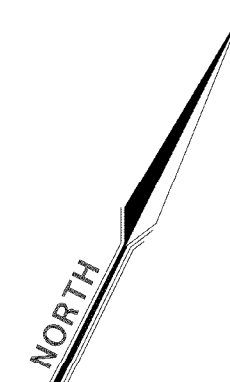
**POST REMEDIATION  
GROUNDWATER MONITORING  
VOLUNTEERS OF AMERICA  
BACK LOT SITE  
NYSDEC SITE No. C828126**



- NOTES:
- 1) EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC, TITLED "VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE" BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.
  - 2) COMBINED SEWER OVERFLOW ABATEMENT PROGRAM (CSOAP), MAINTAINED BY MONROE COUNTY.

**WATER TABLE MAP  
(OVERBURDEN)  
JUNE 11, 2020**

**FIGURE 2**



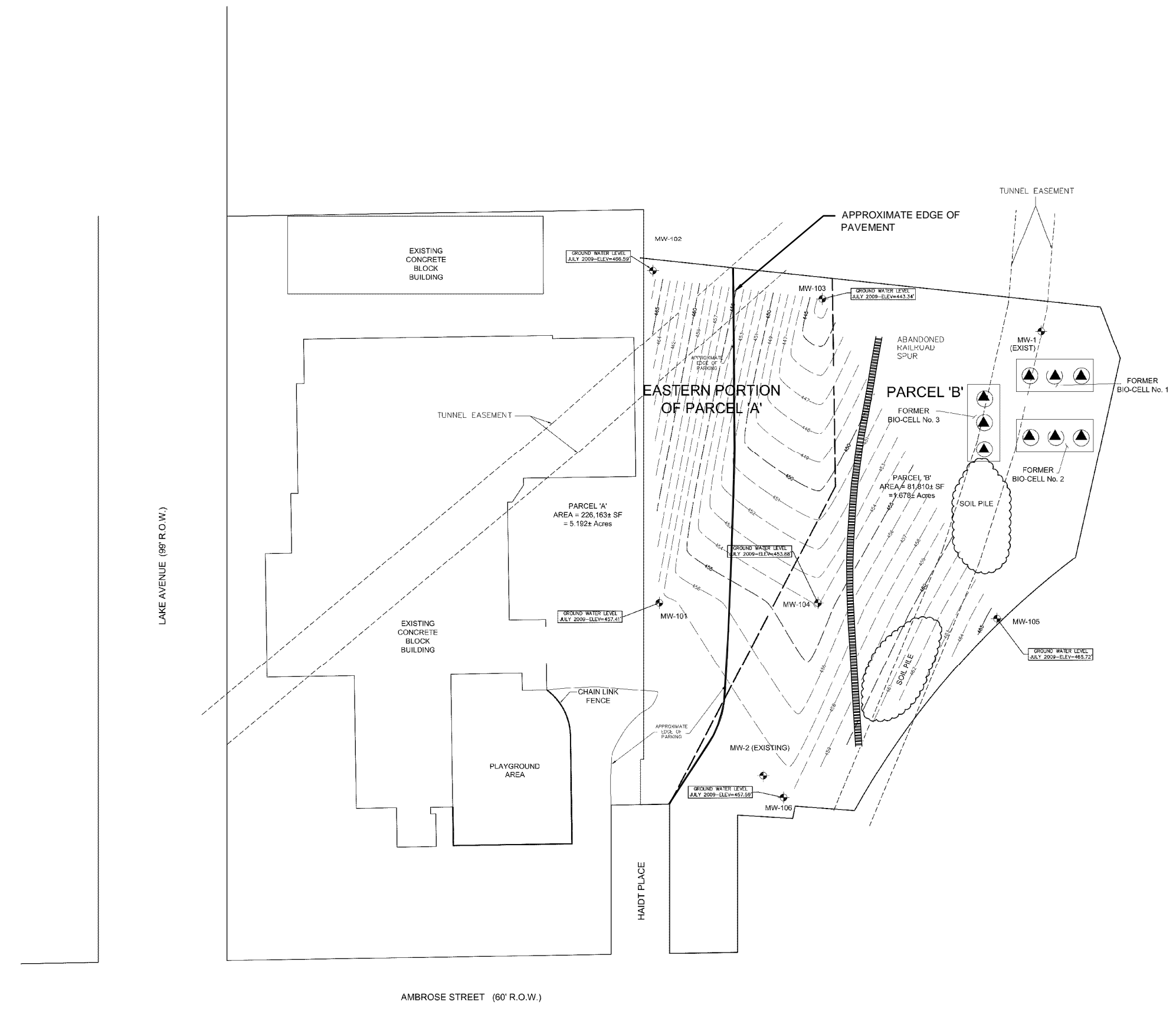
**NOTES:**  
1. GROUNDWATER LEVEL INFORMATION COLLECTED FROM MONITOR WELLS ON JULY 27, 2009.

- LEGEND:**
- EXISTING BUILDING
  - - - EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B'
  - BIO-CELL
  - ~ SOIL PILE
  - ⊙ MONITOR WELL LOCATION
  - ||||| ABANDONED RAILROAD SPUR
  - APPROXIMATE EDGE OF PAVEMENT

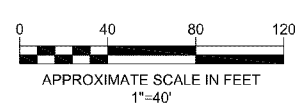


**GROUND WATER CONTOUR MAP**  
JULY 27, 2009  
FOR  
REMEDIAL INVESTIGATION  
EASTERN PORTION OF PARCEL A AND PARCEL B  
214 LAKE AVENUE  
ROCHESTER, NEW YORK  
DECEMBER 15, 2009

**FIG. 6**



EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC, TITLED "VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE" BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.





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## APPENDIX 1



April 27, 2021

Ms. Charlotte Theobald  
Project Manager  
New York State Department of Environmental Conservation  
6274 East Avon-Lima Road  
Avon, New York 14414

Re: Annual Engineering Controls Inspection Report  
Volunteers of America - Back Lot Site  
214 Lake Avenue and 18 Ambrose Street  
NYSDEC Site # C828126  
Rochester, New York

Dear Ms. Theobald:

Bergmann completed an annual inspection of the physical engineering controls (EC) on April 23, 2021. This visual inspection of EC was completed in general accordance with the Maintenance Plan in Appendix 4 of the Site Management Plan (SMP). This annual EC included visual observation for inspection of the following: site-wide engineered cover system (cover system), security fencing, monitoring well condition, and storm water collection system at the Volunteers of America Back Lot Site. The annual inspection of EC was completed in accordance with the requirements of Decision Document and SMP. This inspection is part of maintenance activities related to post-remediation tasks to ensure the integrity of the cover system, security fencing and storm water collection system occupying the area over the remaining contaminated soil and groundwater on-site. At the time of this inspection all the Institutional controls that include the environmental easement were in place as certified in the SMP.

The objectives of the annual inspection are to observe that:

- The cover system is performing the function of properly capping subsurface soils;
- Site storm water collection system is functioning as designed;
- Security fencing is in place and free of significant damage;
- The EC is functioning as intended for protection of human health and the environment.

The cover system over the contaminated Historic fill materials (contaminated soils) and groundwater serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health and the environment. The cover system also acts as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would further impact groundwater. Based on the future restricted residential or commercial use of the property. The cover system should function as intended unless disturbed. The cover system was installed in the back lot area in 2016 and in the Haidt Place right of way during 2017, existing cover system that is roadway/parking areas was installed in 1998. Therefore, the area for EC is the entire Site, see Figure 4 in this report from the Final Engineering report.

Maintaining the integrity and effectiveness of the EC is based on the results of inspections when needed and the required annual inspections to provide recommendations for making repairs to the cover system as necessary to correct the effects of weathering, settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding the cover system. Annual inspection was made on the items noted below and recorded on





the attached inspection forms. This inspection provides recommendations so that maintenance and repairs can be performed before damage occurs that may impact the integrity and effectiveness of the cover system. The EC conditions/issues are noted below based on the initial inspection for elements of the cover system as described below:

Pavement Surface: The entire pavement surface of Cover Type 1 asphalt pavement/millings, including the final (top) surface and side-slopes (pavement millings) was installed in 2016. The surface was inspected for settlement, subsidence, cracks, displacement and presence of vegetation. Cracks and settlement were not observed on Cover Type 1, see photographs. The existing roadway (Cover Type 2) and parking areas that were installed in 1998 as part of the cover system were also inspected for the same conditions. Several areas on the pavement surface of Cover Type 2 are cracked and have pot holes that need repairs, see attached photographs. Four pavement patches were made as repairs to Cover Type 2 during 2019 and additional repairs need to be made during 2021, see photographs. Repairs for Cover Type 2 should include pavement patches and by applying sealer coat to the cracked sections of pavement.

Grass Cover: The limited grass cover areas of Cover Type 3 (Landscaped lawn) were inspected for erosion, displacement, vegetation other than grasses. The integrity of the grass landscaped Cover Type 3 in parking lot islands and within curbed / planter areas is in good condition, see photographs. Areas of Cover Type 3 along the west side of the Haidt place Right of Way have patches of exposed soils that requires seeding to prevent erosion and weed growth, see photographs.

Final Cover Surface: The final cover surface was inspected and ponding of water or flat areas was not observed. This inspection was on the day after a rain event. There was no apparent settlement, subsidence, erosion, depressions or flat areas. Ponding of water was not observed on the cover system, see photographs.

Erosion Damage Repair: The road way pavement along Haidt Place has pot holes with cracks in the asphalt that require repairs by means of asphalt patches and or sealing. This will allow for repairs by placement of asphalt and compacting the material in-kind to design grade/specifications and using sealer on cracks. The sealer installed during 2016 is in good condition. Follow-up monitoring of the repaired area will be conducted to ascertain the integrity of the repair. Erosion along the west side of the Haidt Place ROW in the landscaped lawn area was not observed, see photographs. Patches of exposed soil in the landscaped lawn area of the Cover Type 3 were not observed.

Settlement, Subsidence, and Displacement: Evidence of settlement, subsidence, or displacement of the cover system was not observed, see Photographs.

Cover System Surface: Evidence of ponding water on the cover system (cap surface) was not observed, see photographs. Exposed soil in the lawn area of Cover Type 3 was not observed on April 23, 2021, on the west side of Haidt Place ROW have been repaired, see Photographs.

Groundwater Monitoring System: The groundwater monitoring system was inspected for the general integrity of the wells, well casings and well protective casings during the inspection of the cover system. The concrete surface seal is cracked and steel well box (protective surface casing) for monitoring well MW-101 was bent and needs replacement. The following monitoring wells need repairs:

- MW-101 requires repairs and replacement for a new concrete surface seal and new well protective roadway box.



Storm water Collection System: This inspection was made on the day after a rain event. The surface drainage system of the storm water collection system was inspected for erosion, integrity of manholes/catch basins, ponding, and accumulated sediment. The low areas of the cover system pavement surface are designed to route surface run-off to the catch basins of the storm water collection system below the cover system in the fenced area of the back lot. There was no observed collection of sediments in the catch basins / manholes, see photographs. Water was observed moving through the manholes. Ponding of water on the surface of cover system was not observed.

Security Fencing: The majority of the Site is fenced to reduce access to the back lot Cover Type 1 area, storm water collection system and monitoring wells. The fence height ranges from 8 foot and 6 foot along the perimeter of this area. The roadway, parking lot areas and grass cover / pavement cover along the Haidt Place right-of way are not fenced. One area of the fence was damaged near the southern end of the back lot area during the winter of 2020 and was observed to be repaired during the April 23, 2021 annual inspection, see photographs. Vegetation needs to be removed from the fenced areas along Covers Type 1 of the back lot, see photographs.

Overall, all the EC are functional and IC in place for protection of human health and the environment. The following action items for maintenance and repairs were noted from the Annual EC inspection on April 23, 2021:

1. Make repairs to pot holes / cracks in the existing roadway Cover Type 2 installed in 1998. Asphalt patches required to match material and elevation of existing pavement surface. Crack sealer coat needs to be applied to Cover Type 2 areas (pavement roadway areas installed in 1998) where cracking has developed.
2. Remove vegetation that includes weeds and brush along the fencing of the back lot. It is recommended to manually remove vegetation in place of use of herbicides (weed killer).
3. Replace the steel well cover and concrete surface seal at monitoring well MW-101.
4. Bergmann engineer to coordinate these repairs during 2021.

If you have questions, please contact me at (607) 333-3121.

Bergmann

Sincerely,

Mufuta Tshimanga, P. E.



Seal

Attachments: Annual Maintenance Inspection Form, Figure 4, and Photographs

### Annual Maintenance Inspection Form

Name(s) of Inspectors: MUFUTA TSHIMANGA, PE + STEVE DEMEO

Date of Inspection: 04/23/21

Location of the permeable pavement facility: 18 AMBROSE ST / 214 LAKE AVENUE

Surface/wearing course type: ASPHALT PAVEMENT, BINDER COURSE

Address or Intersection: \_\_\_\_\_

Age of permeable pavement facility: COVER TYPE 1 - 4YRS 8 MONTHS (BACKLOT) 4YRS (HWT PLACE)

Permeable pavement facility area: ~ 3 ACRES

COVER TYPE 2 - 22 YRS

COVER TYPE 3 - 3YRS 6 MONTHS

Site Sketch (include curbs, islands, trees, north arrow, etc.)  
or insert Photographs from inspection date.

SEE ATTACHED

Based on visual assessment of the site, answer the following questions and take photographs of the site:

Surface/Wearing Course

1. Are there indications of any of the following on the surface of the permeable pavement facility? (If yes, mark on site sketch)

- ☐ Excessive sediment
- ☐ Moss growth
- ☒ Cracks, trip hazards, or concrete spalling
- ☐ Trash and debris
- ☐ Leaf accumulation
- ☐ Settlement of surface
- ☐ Other: \_\_\_\_\_
- ☐ None

2. Is there ponding on the surface of the permeable pavement? ☐ Yes ☒ No

If yes, describe the potential reasons for ponded water below (leaf or debris build up, non-functional underdrain, groundwater input, illicit connection, inadequate capacity in facility, etc.)

Notes and or Photographs from inspection date.

SEE PHOTOS:

- EXTENSIVE CRACKING IN COVER TYPE 2 AREA
- GRASS COVER TYPE 3 IN GOOD CONDITION
- VEGETATION BETWEEN FENCE AND CAP TO BE REMOVED
- MW-101 NEEDS REPAIR TO CONCRETE SURFACE  
SEAL AND STEEL WELL BOX.

#### Inlets/Outlets/Pipes

3. How many inlet pipes are present? ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5 ☐ > 5

4. Are any of the inlet pipes clogged? (If yes, mark the location on your site sketch and fill in the boxes below with the cause of the clogging (e.g., debris, sediment, vegetation, etc.) ☒ No ☐ Partially ☐ Completely ☐ NA

5. Are any of the inlet pipes altered from the original design or otherwise in need of maintenance? (If yes, write in reason: frost heave, vandalism, unknown, etc.)

ND

Inlet No.

Inlet No.

Inlet No.

Partly  
clogged  
Completely  
Clogged  
Reason for  
Maintenance

6. Are any overflow, underdrains, raised subsurface overflow pipes, or outlet structures clogged?

☒ No ☐ Partially ☐ Completely ☐ NA

a. If yes, mark the location on your site sketch and fill in the boxes below with the cause of the clogging (e.g., debris, sediment, vegetation, moss, etc.)

b. Are any of the overflow structures altered from the original design or otherwise in need of maintenance? (If yes, write in reason: frost heave, vandalism, unknown)

Inlet No.      Inlet No.      Inlet No.

Partly  
clogged  
Completely  
Clogged  
Reason for  
Maintenance

Observation Port (if present)

7. Is water remaining in the storage aggregate longer than anticipated by design after the end of a storm?

☐ Yes ☒ No ☐ Unknown

a. If yes, identify potential cause of extended ponding and mark the location of observed extended ponding on your site sketch.

Summary

8. Inspector's Recommendations. When is maintenance needed?

- ☐ Immediately      APPLY SEAL COAT - COVER TYPE 2  
☐ Within a month or two      REMOVE VEGETATION ALONG FENCE  
☒ Within a year      MW-101 NEEDS REPAIR  
☐ No sign that any maintenance is required

9. Summarize the results of this inspection and write any other observations in the box below  
Summary and other observations or Photographs from  
inspection date.

APPLY SEAL COAT TO COVER TYPE 2

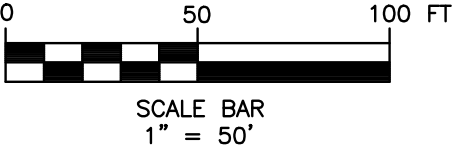
REMOVE VEGETATION ALONG FENCE

SEE PHOTOS



Cover Type	Cross-Section
<b>Cover Type 1:</b> Asphalt pavement and Asphalt millings constructed over the majority of the Site (Installed 2016) and the western right of way at Haidt Place 2017.	2016 Installation: A subbase-recycled concrete, minimum of 18 inches and maximum of 27 inches compacted above black geo-textile demarcation layer. Binder 4-inches upper surface of cover system (flat surface) installed. Asphalt millings approximately 4 to 6 inches thick compacted on slope perimeter of cover system.  2017 Haidt Place:2- foot thick Crusher Run #2 with 4-inches of asphalt cover placed along the eastern right of way.
<b>Cover Type 2:</b> Existing Asphalt Pavement roadway, concrete walkway and parking areas (Installed 1998)	Top Course-1.5 inches Binder-3.5 inches Base Course-4 inches Subbase-12 inches Placed for roadways and parking areas along the west side of the Site. Pavement cracks sealed in 2016.
<b>Cover Type 3:</b> Landscaped lawn (Installed1998) and in the west side of the Haidt Place right of way 2017.	1998 Landscaped Lawn: Existing grass covered topsoil 2-inches, with 12 inches soil cover thickness (min) placed along the southwest side of the Site near VOA children's playground in 1998.  2017 Haidt Place: 2- foot of imported Crusher Run #2 with 4 to 6-inches of top soil place in 2017 along the west side of Haidt Place.

\* Recycled concrete thickness varies due to underlying impacted re-used Site soils.  
\* Demarcation layer represented by orange snow fence on Haidt Place 2017

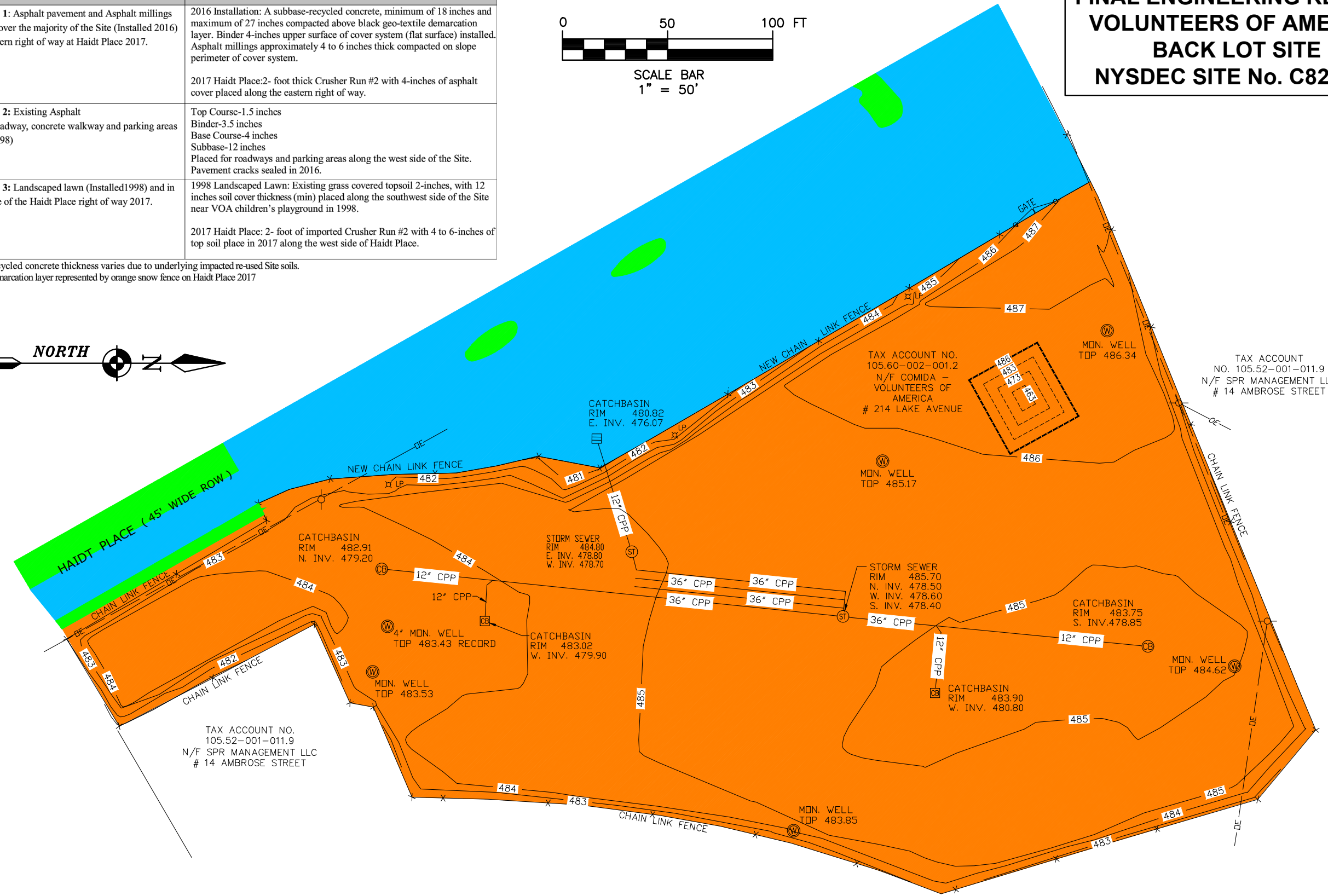


**FINAL ENGINEERING REPORT  
VOLUNTEERS OF AMERICA  
BACK LOT SITE  
NYSDEC SITE No. C828126**

**BERGMANN  
ASSOCIATES**

Bergmann Associates, Architects, Engineers,  
Landscape Architects & Surveyors, D.P.C.

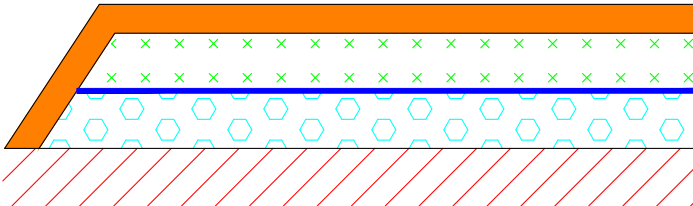
280 East Broad Street  
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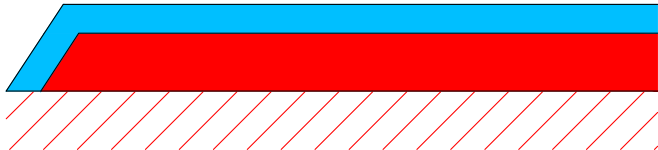
**LEGEND**

- PAVEMENT APPROXIMATELY 0 TO 6.0 INCHES
- RECYCLED CONCRETE 6 TO 18.0 INCHES
- DEMARCATION LAYER
- REUSED ON-SITE SOIL TESTED FROM RI APPROXIMATELY 18.0 TO 42.0 INCHES
- ORIGINAL GROUND SURFACE
- GRASS COVERED TOPSOIL 0 TO 2 INCHES
- TOPSOIL 4 TO 6 INCHES
- IMPORTED GRAVEL 4 TO 22 INCHES
- SUBBASE 9 TO 21 INCHES
- PAVEMENT 0 TO 9 INCHES

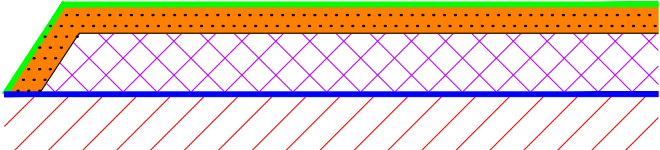
COVER TYPE 1 – MINIMUM  
487 ELEVATION



COVER TYPE 2 – MINIMUM



COVER TYPE 3 – MINIMUM  
485 ELEVATION



**CONTOUR MAP  
OF EXCAVATION AND  
BACKFILL THICKNESS**

**FIGURE 4**





View looking west at northwest area Cover Type 2.



View looking north Cover Type 3, grass cover west central side of Site.





Cover Type 2 and Type 3, looking south towards Haidt Place/Ambrose St .



Cover Type 3, grass cover on Haidt Place ROW, view looking west.





Type 2 Cover potholes and patched area from 2019.



Cover Type 2 Haidt Place and Haidt Place ROW.





Cover Type 2, view looking south at pothole areas and patches from 2019.



Cover Type 2, view looking south at pothole area/cracks and patched spots.





Cracked surface seal/damaged well box at monitoring well MW-101.



Catch basin manhole number 4 in Cover type 2.





Cover Type 1 and Cover Type 2, view looking south.



2020 repaired section of fencing for Cover Type 1.



Cover Type 1, view looking north.



Cover Type 1 view looking west.





Storm manhole in Cover Type 1.



Cover Type 1, view looking south.



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## APPENDIX 2

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

### Region 8 Main Office

6274 East Avon-Lima Road, Avon, NY 14414-9516

P: (585) 226-2466 | F: (585) 226-2830

[www.dec.ny.gov](http://www.dec.ny.gov)

March 8, 2021

Lynn Sullivan  
President & Chief Executive Officer  
Volunteers of America  
214 Lake Avenue  
Rochester, New York 14608

Re: Site Management  
Periodic Review Report Response Letter  
Volunteers of America Back Lot  
Site No.: C828126  
City of Rochester, Monroe (C)

Dear Ms. Sullivan:

The Department has reviewed your 2020 Periodic Review Report and IC/EC Certification for following period: April 29, 2019 to April 29, 2020.

The Department hereby accepts the 2020 Periodic Review Report. Please note that the request in the 2020 PRR for a reduction/termination of the groundwater sampling requirement was addressed in the Department's letter dated June 3, 2020. The letter is attached for your convenience.

The frequency of Periodic Reviews for this site is annual, your next PRR is due on June 1, 2021. You will receive a reminder letter and updated certification form 75-days prior to the due date. Regardless of receipt or not, of the reminder notice, the next PRR including the signed certification form, is still due on the date specified above.

If you have any questions, concerns, need additional forms, or need further assistance with the Site, please feel free to contact me at 585-226-5354 or via e-mail at [charlotte.theobald@dec.ny.gov](mailto:charlotte.theobald@dec.ny.gov).

Sincerely,



Charlotte Theobald  
Project Manager  
Assistant Engineer







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



**Site No.** C828126 **Site Details** **Box 1**

**Site Name** Volunteers of America Back Lot Site

Site Address: 18 Ambrose Street and portion of 214 Lake Avenue Zip Code: 14608  
City/Town: Rochester  
County: Monroe  
Site Acreage: 3.055

Reporting Period: April 30, 2020 to April 30, 2021

- |  | YES                                 | NO                                  |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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?                              | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b> |                                     |                                     |
| 5. Is the site currently undergoing development?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Box 2**

- |   | YES                                 | NO                       |
|---|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?<br>Restricted-Residential, Commercial, and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**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**

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)

☐

**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. C828126****Box 3****Description of Institutional Controls**



ParcelOwnerInstitutional Control**105.60-2-1.002 (portion of)**

County of Monroe Industrial Development

Ground Water Use Restriction  
Landuse Restriction  
Monitoring Plan  
Site Management Plan  
IC/EC Plan

Imposition of an institutional control in the form of an environmental easement for the controlled property which will: 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 restricted residential as defined by Part 375-1.8(g), although land use is subject to local zoning laws; restrict 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 require compliance with the Department approved Site Management Plan.

A Site Management Plan is required, which includes the following: an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective.

This plan includes, but may not be limited to: an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions; a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion; provisions for the management and inspection of the identified engineering controls; maintaining site access controls and Department notification; and the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to: monitoring of groundwater to assess the performance and effectiveness of the remedy; a schedule of monitoring and frequency of submittals to the Department; and monitoring for vapor intrusion for any future buildings developed on the site.

**105.60-2-59.003**

Volunteers of America of Western NY

Ground Water Use Restriction  
Landuse Restriction  
Monitoring Plan  
Site Management Plan  
IC/EC Plan

Imposition of an institutional control in the form of an environmental easement for the controlled property which will: 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 restricted residential as defined by Part 375-1.8(g), although land use is subject to local zoning laws; restrict 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 require compliance with the Department approved Site Management Plan.

A Site Management Plan is required, which includes the following: an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective.

This plan includes, but may not be limited to: an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions; a provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion; provisions for the management and inspection of the identified engineering controls; maintaining site access controls and Department notification; and the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to: monitoring of groundwater to assess the performance and effectiveness of the remedy; a schedule of monitoring and frequency of submittals to the Department; and monitoring for vapor intrusion for any future buildings developed on the site.

**Description of Engineering Controls**ParcelEngineering Control**105.60-2-1.002 (portion of)****Cover System**

A site cover will be required to allow for restricted residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).

**105.60-2-59.003****Cover System**

A site cover will be required to allow for restricted residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d).



**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

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C828126

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.

I Stephen DeMeo at 280 East Broad Street, Rochester, NY 14609  
print name print business address

am certifying as Consultant for Owner for the Site named in (Owner or Remedial Party)  
The Site details of this form

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

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

MAY 28, 2021  
Date

# IC/EC CERTIFICATIONS

Signature

Box 7

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 Mufuta Tshimanga at 280 East Broad St, Suite 200, Rochester, NY 14604  
print name print business address

Consultant for Owner for the site named

am certifying as a for the in the site details of this form.

(Owner or Remedial Party)

Tshimanga



6/1/21

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

Date



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

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## APPENDIX 3



**TABLE 8 Groundwater Sample Analytical Summary**  
**Semi-Volatile Organic Compounds – Method OLM 4.2**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

Semi-volatile Organic Compounds Page 1 of 4	VOAMW - 101 10/30/08	VOAMWR - 101 10/30/08	VOAMW - 102 10/31/08	VOAMWR - 102 10/31/08	VOAMW - 103 10/31/08	VOAMW - 104 10/30/08	NYSDEC Groundwater Standards
Acenaphthene	9ND	9ND	9ND	9ND	2.0J	9ND	20
Acenaphthylene	9ND	9ND	9ND	9ND	9ND	9ND	-
Acetophenone	9ND	9ND	9ND	9ND	9ND	9ND	-
Anthracene	1.0J	9ND	9ND	9ND	9ND	9ND	50
Atrazine	9ND	9ND	9ND	9ND	9ND	9ND	7.5
Benzaldehyde	9ND	9ND	9ND	9ND	9ND	9ND	-
Benzo (a) Anthracene	2.0J	9ND	9ND	9ND	1.0J	1.0J	0.002
Benzo (a) Pyrene	2.0J	9ND	9ND	9ND	2.0J	1.0J	ND
Benzo (b) Fluoranthene	1.0J	9ND	9ND	9ND	1.0J	1.0J	0.002
Benzo (g,h,i) Perylene	1.0J	9ND	9ND	9ND	2.0J	9ND	-
Benzo (k) Fluoranthene	1.0J	9ND	9ND	9ND	9ND	9ND	0.002
Biphenyl	9ND	9ND	9ND	9ND	9ND	9ND	-
Butyl Benzyl Phthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
Di-N-Butylphthalate	3.0JB	3.0JB	3.0JB	3.0JB	3.0JB	3.0JB	50
Caprolactam	24ND	3.0J	9ND	9ND	8.0J	9ND	-
Carbazole	9ND	9ND	9ND	9ND	9ND	9ND	-
Indeno (1,2,3-cd) Pyrene	1.0J	9ND	9ND	9ND	1.0J	9ND	0.002
4-Chloroaniline	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Bis (-2-Chloroethoxy) Methane	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Bis (-2-Chloroethyl) Ether	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2-Chloronaphthalene	9ND	9ND	9ND	9ND	9ND	9ND	10
2-Chlorophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2,2'- Oxybis (1-Chloropropane)	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Chrysene	2.0J	9ND	9ND	9ND	1.0J	1.0J	0.002
Dibenz (a,h) Anthracene	9ND	9ND	9ND	9ND	9ND	9ND	-
Dibenzofuran	9ND	9ND	9ND	9ND	2.0J	9ND	-
3,3'- Dichlorobenzidine	9ND	9ND	9ND	9ND	9ND	9ND	5.0
2,4- Dichlorophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
Diethylphthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
Dimethyl Phthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
2,4- Dimethylphenol	24ND	24ND	24ND	24ND	1.0J	9ND	1.0
2,4- Dinitrophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2,4- Dinitrotoluene	9ND	9ND	9ND	9ND	9ND	9ND	5.0
2,6- Dinitrotoluene	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Bis (2-Ethylhexyl) Phthalate	2.0JB	4.0JB	3.0JB	9.0JB	4.0JB	3.0JB	5.0

**TABLE 8 Groundwater Sample Analytical Summary**  
**Semi-Volatile Organic Compounds – Method OLM 4.2**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

Semi – volatile Organic Compounds Page 2 of 4	VOAMW - 101 10/30/08	VOAMWR - 101 10/30/08	VOAMW - 102 10/31/08	VOAMWR - 102 10/31/08	VOAMW – 103 10/31/08	VOAMW – 104 10/30/08	NYSDEC Groundwater Standards
Fluoranthene	<b>4.0J</b>	9ND	9ND	9ND	9ND	<b>2.0J</b>	50
Fluorene	9ND	9ND	9ND	9ND	9ND	9ND	50
Hexachlorobenzene	9ND	9ND	9ND	9ND	9ND	9ND	0.04
Hexachlorobutadiene	9ND	9ND	9ND	9ND	9ND	9ND	0.5
Hexachlorocyclopentadiene	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Hexachloroethane	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Isophorone	9ND	9ND	9ND	9ND	9ND	9ND	5.0
2- Methylnaphthalene	9ND	9ND	9ND	9ND	<b>2.0J</b>	9ND	-
4,6- Dinitro-2- Methylphenol	24ND	24ND	24ND	24ND	24ND	9ND	1.0
4- Chloro-3- Methylphenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2- Methylphenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
4- Methylphenol	<b>36.0</b>	9ND	9ND	9ND	<b>3.0J</b>	<b>1.0J</b>	1.0
Naphthalene	<b>2.0J</b>	9ND	9ND	9ND	<b>6.0J</b>	9ND	10
2- Nitroaniline	24ND	24ND	24ND	24ND	24ND	24ND	5.0
3- Nitroaniline	24ND	24ND	24ND	24ND	24ND	24ND	5.0
4- Nitroaniline	24ND	24ND	24ND	24ND	24ND	24ND	5.0
Nitrobenzene	9ND	9ND	9ND	9ND	9ND	9ND	0.4
2- Nitrophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
4- Nitrophenol	24ND	24ND	24ND	24ND	24ND	24ND	1.0
N- Nitrosodiphenylamine	9ND	9ND	9ND	9ND	9ND	9ND	50
Di-n-octyl Phthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
Pentachlorophenol	24ND	24ND	24ND	24ND	24ND	24ND	5.0
Phenanthrene	<b>4.0J</b>	9ND	9ND	9ND	<b>3.0J</b>	<b>1.0J</b>	5.0
Phenol	<b>6.0J</b>	9ND	9ND	9ND	<b>2.0J</b>	9ND	1.0
4- Bromophenyl- Phenylether	9ND	9ND	9ND	9ND	9ND	9ND	-
4- Chlorophenyl- Phenylether	9ND	9ND	9ND	9ND	9ND	9ND	-
N- nitroso-di-n- Propylamine	9ND	9ND	9ND	9ND	9ND	9ND	-
Pyrene	<b>3.0J</b>	9ND	9ND	9ND	<b>2.0J</b>	<b>2.0J</b>	5.0
2,4,6- Trichlorophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2,4,5- Trichlorophenol	24ND	24ND	24ND	24ND	24ND	24ND	1.0
Total TICs Concentration and Number of TICs Detected	<b>53.0J,JB (16)</b>	<b>8.0 J,JB (3)</b>	<b>12.0 J,JB,JN (5)</b>	<b>2.0JB (1)</b>	<b>18.0 J,JB,JN (7)</b>	<b>40.0 J,JB,JN (8)</b>	NA

Notes: Groundwater samples collected on October 30, 2008 and October 31, 2008 by GeoQuest Environmental, Inc. concentrations expressed in parts per billion (ppb). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed NYSDEC Groundwater standard. See laboratory case narrative page 3 for **J, JN, JB** estimated values. - = No standard, ND = non detection above limits. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.

**TABLE 8 Groundwater Sample Analytical Summary  
Semi-Volatile Organic Compounds – Method OLM 4.2**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

Semi-volatile Organic Compounds Page 3 of 4	VOAMW - 105 10/31/08	VOAMW - 105 10/30/08 dup.	VOAMW - 106 10/30/08	NYSDEC Groundwater Standards
Acenaphthene	9ND	9ND	3.0J	20
Acenaphthylene	9ND	9ND	9ND	-
Acetophenone	9ND	9ND	9ND	-
Anthracene	9ND	9ND	4.0J	50
Atrazine	9ND	9ND	9ND	7.5
Benzaldehyde	9ND	9ND	9ND	-
Benzo (a) Anthracene	9ND	9ND	10.0J	0.002
Benzo (a) Pyrene	9ND	9ND	10.0J	ND
Benzo (b) Fluoranthene	9ND	9ND	7.0J	0.002
Benzo (g,h,i) Perylene	9ND	9ND	6.0J	-
Benzo (k) Fluoranthene	9ND	9ND	8.0J	0.002
Biphenyl	9ND	9ND	9ND	-
Butyl Benzyl Phthalate	9ND	9ND	9ND	50
Di-N-Butylphthalate	2.0JB	3.0JB	3.0JB	50
Caprolactam	24ND	24ND	24ND	-
Carbazole	9ND	9ND	9ND	-
Indeno (1,2,3-cd) Pyrene	9ND	9ND	5.0J	0.002
4-Chloroaniline	9ND	9ND	9ND	5.0
Bis (-2-Chloroethoxy) Methane	9ND	9ND	9ND	5.0
Bis (-2-Chloroethyl) Ether	9ND	9ND	9ND	1.0
2-Chloronaphthalene	9ND	9ND	9ND	10
2-Chlorophenol	9ND	9ND	9ND	1.0
2,2'- Oxybis (1-Chloropropane)	9ND	9ND	9ND	5.0
Chrysene	9ND	9ND	9.0J	0.002
Dibenz (a,h) Anthracene	9ND	9ND	9ND	-
Dibenzofuran	9ND	9ND	9ND	-
3,3'- Dichlorobenzidine	9ND	9ND	9ND	5.0
2,4- Dichlorophenol	9ND	9ND	9ND	1.0
Diethylphthalate	9ND	9ND	9ND	50
Dimethyl Phthalate	9ND	9ND	9ND	50
2,4- Dimethylphenol	24ND	24ND	24ND	1.0
2,4- Dinitrophenol	9ND	9ND	9ND	1.0
2,4- Dinitrotoluene	9ND	9ND	9ND	5.0
2,6- Dinitrotoluene	9ND	9ND	9ND	5.0
Bis (2-Ethylhexyl) Phthalate	2.0JB	2.0JB	5.0JB	5.0

**TABLE 8 Groundwater Sample Analytical Summary  
Semi-Volatile Organic Compounds – Method OLM 4.2**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

Semi – volatile Organic Compounds Page 4 of 4	VOAMW - 105 10/31/08	VOAMW - 105 10/31/08 dup.	VOAMW - 106 10/30/08	NYSDEC Groundwater Standards
Fluoranthene	9ND	9ND	<b>22.0</b>	50
Fluorene	9ND	9ND	<b>3.0J</b>	50
Hexachlorobenzene	9ND	9ND	9ND	0.04
Hexachlorobutadiene	9ND	9ND	9ND	0.5
Hexachlorocyclopentadiene	9ND	9ND	9ND	5.0
Hexachloroethane	9ND	9ND	9ND	5.0
Isophorone	9ND	9ND	9ND	5.0
2- Methylanthralene	9ND	9ND	9ND	-
4,6- Dinitro-2- Methylphenol	24ND	24ND	24ND	1.0
4- Chloro-3- Methylphenol	9ND	9ND	9ND	1.0
2- Methylphenol	9ND	9ND	9ND	1.0
4- Methylphenol	9ND	9ND	9ND	1.0
Naphthalene	9ND	9ND	<b>4.0J</b>	10
2- Nitroaniline	24ND	24ND	24ND	5.0
3- Nitroaniline	24ND	24ND	24ND	5.0
4- Nitroaniline	24ND	24ND	24ND	5.0
Nitrobenzene	9ND	9ND	9ND	0.4
2- Nitrophenol	9ND	9ND	9ND	1.0
4- Nitrophenol	24ND	24ND	24ND	1.0
N- Nitrosodiphenylamine	9ND	9ND	9ND	50
Di-n-octyl Phthalate	9ND	9ND	9ND	50
Pentachlorophenol	24ND	24ND	24ND	5.0
Phenanthrene	9ND	<b>2.0J</b>	<b>11.0J</b>	5.0
Phenol	9ND	9ND	9ND	1.0
4- Bromophenyl- Phenylether	9ND	9ND	9ND	-
4- Chlorophenyl- Phenylether	9ND	9ND	9ND	-
N- nitroso-di-n- Propylamine	9ND	9ND	9ND	-
Pyrene	9ND	9ND	<b>18.0J</b>	5.0
2,4,6- Trichlorophenol	9ND	9ND	9ND	1.0
2,4,5- Trichlorophenol	24ND	24ND	24ND	1.0
Total TICs Concentration and Number of TICs Detected	<b>2.0 JB (1)</b>	<b>9.0 J,JB,JN (4)</b>	<b>60.0 J,JB,JN, (9)</b>	NA

Notes: Groundwater samples collected on October 30, 2008 and October 31, 2008 by GeoQuest Environmental, Inc.

All concentrations expressed in parts per billion (ppb). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed NYSDEC groundwater standard. See laboratory case narrative page 3 for **J, JN, JB** estimated values. - = No standard, ND = non-detection above detection limits. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.

**TABLE 9 Groundwater Analytical Summary**  
**Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 1 of 8	VOAMW-101 (10/30/08)	VOAMWR-101 (10/30/08)	VOAMW-102 (10/31/08)	VOAMWR-102 (10/31/08)	VOAMW-103 (10/31/08)	VOAMW-104 (10/30/08)	NYDEC Groundwater Standard
Acetone	2.0JB	10ND	10ND	1.0JB	2.0JB	1.0JB	50
Benzene	10ND	10ND	10ND	10ND	10ND	10ND	0.7
Bromodichloromethane	10ND	3.0J	10ND	10ND	10ND	10ND	50
Bromoform	10ND	10ND	10ND	10ND	10ND	10ND	50
Bromomethane	10ND	10ND	10ND	10ND	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	10ND	10ND	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	10ND	10ND	31.0	10ND	10ND	10
Carbon Disulfide	10ND	10ND	10ND	0.9J	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	10ND	10ND	10ND	10ND	5
Chlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	5
Chloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
Chloroform	10ND	6.0J	10ND	10ND	10ND	10ND	7
Chloromethane	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	10ND	10ND	10ND	10ND	-
Cyclohexane	10ND	10ND	10ND	10ND	10ND	10ND	-
Dibromochloromethane	10ND	1.0J	10ND	10ND	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	10ND	10ND	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	3
1,4- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	3
1,3- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1- Dichloroethane	10ND	10ND	10ND	10ND	10ND	0.7J	5
1,2- Dichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	10ND	1.0J	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	10ND	10ND	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	10ND	10ND	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	10ND	10ND	10ND	10ND	5
Ethylbenzene	10ND	10ND	10ND	10ND	10ND	10ND	5
2- Hexanone	10ND	10ND	10ND	10ND	10ND	10ND	50
Isopropylbenzene	10ND	10ND	10ND	10ND	10ND	10ND	-
Methyl Acetate	10ND	10ND	10ND	10ND	10ND	10ND	-
Methylcyclohexane	10ND	0.4J	3.0J	10ND	10ND	10ND	-
Methylene Chloride	10ND	10ND	10ND	10ND	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	10ND	10ND	10ND	10ND	5

**TABLE 9 Groundwater Analytical Summary**  
**Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 2 of 8	VOAMW-101 (10/30/08)	VOAMWR-101 (10/30/08)	VOAMW-102 (10/31/08)	VOAMWR-102 (10/31/08)	VOAMW-103 (10/31/08)	VOAMW-104 (10/30/08)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
Tetrachloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Toluene	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	10ND	10ND	10ND	10ND	-
Vinyl Chloride	10ND	10ND	10ND	10ND	10ND	10ND	2
M+P- Xylene	10ND	10ND	<b>0.3J</b>	10ND	10ND	10ND	5
O- Xylene	10ND	10ND	10ND	10ND	10ND	10ND	5
Tentatively Identified Compounds Total and number detected	ND	ND	<b>39J,JN (5)</b>	<b>8J (1)</b>	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standards.
2. - = No standards available and ND = non detection above the laboratory limits.
3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
4. Samples collected by GeoQuest Environmental, Inc. on October 30, 2008 and October 31, 2008 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.

**TABLE 9 Groundwater Analytical Summary**  
**Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 3 of 8	VOAMW-105 (10/31/08)	VOAMW-105 (10/31/08)dup.	VOAMW-106 (10/30/08)	TRIP BLANK (10/30/08)	NYDEC Groundwater Standard
Acetone	10ND	10ND	<b>2.0JB</b>	<b>0.7JB</b>	50
Benzene	10ND	10ND	10ND	10ND	0.7
Bromodichloromethane	10ND	10ND	10ND	10ND	50
Bromoform	10ND	10ND	10ND	10ND	50
Bromomethane	10ND	10ND	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	10ND	10ND	10ND	10
Carbon Disulfide	10ND	10ND	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	10ND	10ND	5
Chlorobenzene	10ND	10ND	<b>2.0J</b>	10ND	5
Chloroethane	10ND	10ND	10ND	10ND	5
Chloroform	10ND	10ND	10ND	10ND	7
Chloromethane	10ND	10ND	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	10ND	10ND	-
Cyclohexane	10ND	10ND	10ND	10ND	-
Dibromochloromethane	10ND	10ND	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	10ND	<b>0.4J</b>	10ND	3
1,4- Dichlorobenzene	10ND	10ND	10ND	10ND	3
1,3- Dichlorobenzene	10ND	10ND	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	10ND	10ND	-
1,1- Dichloroethane	10ND	10ND	10ND	10ND	5
1,2- Dichloroethane	10ND	10ND	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	10ND	10ND	5
Ethylbenzene	10ND	10ND	10ND	10ND	5
2- Hexanone	10ND	10ND	10ND	10ND	50
Isopropylbenzene	10ND	10ND	10ND	10ND	-
Methyl Acetate	10ND	10ND	10ND	10ND	-
Methylcyclohexane	<b>0.3J</b>	<b>0.4J</b>	10ND	10ND	-
Methylene Chloride	10ND	10ND	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	10ND	10ND	5

**TABLE 9 Groundwater Analytical Summary  
Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 4 of 8	VOAMW-105 (10/31/08)	VOAMW-105 (10/31/08)dup.	VOAMW-106 (10/30/08)	TRIP BLANK (10/30/08)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	10ND	10ND	5
Tetrachloroethene	10ND	10ND	10ND	10ND	5
Toluene	<b>0.3J</b>	<b>0.4J</b>	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	10ND	10ND	5
Trichloroethene	10ND	10ND	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	10ND	10ND	-
Vinyl Chloride	10ND	10ND	10ND	10ND	2
M+P- Xylene	10ND	10ND	10ND	10ND	5
O- Xylene	10ND	10ND	10ND	10ND	5
Tentatively Identified Compounds Total and number detected	ND	ND	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory detection limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standard.
2. - = No standards available and ND = non detection above the laboratory detection limits.
3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
4. Samples collected by GeoQuest Environmental, Inc. on October 30, 2008 and October 31, 2008 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



**TABLE 9 Groundwater Analytical Summary  
Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

[illegible]

**TABLE 9 Groundwater Analytical Summary  
Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 6 of 8	VOAMW-101 (7/27/09)	VOAMW-101 Duplicate (7/27/09)	VOAMWR-101 (7/27/09)	VOAMW-102 (7/27/09)	VOAMWR-102 (7/27/09)	VOAMW-103 (7/27/09)	VOAMW-104 (7/27/09)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Tetrachloroethene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Toluene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Vinyl Chloride	10ND	10ND	10ND	10ND	10ND	10ND	10ND	2
M+P- Xylene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
O- Xylene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Tentatively Identified Compounds Total and number detected	ND	ND	ND	<b>6.1JN (1)</b>	<b>9.4JN (1)</b>	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standards.
2. - = No standards available and ND = non detection above the laboratory limits.
3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
4. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.

**TABLE 9 Groundwater Analytical Summary**  
**Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 7 of 8	VOAMW-105 (7/27/09)	VOAMW-106 (7/27/09)	NYDEC Groundwater Standard
Acetone	2.6J	1.5J	50
Benzene	10ND	10ND	0.7
Bromodichloromethane	10ND	10ND	50
Bromoform	10ND	10ND	50
Bromomethane	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	0.41J	10
Carbon Disulfide	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	5
Chlorobenzene	10ND	22	5
Chloroethane	10ND	10ND	5
Chloroform	10ND	10ND	7
Chloromethane	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	-
Cyclohexane	10ND	10ND	-
Dibromochloromethane	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	1.7J	3
1,4- Dichlorobenzene	10ND	1.2J	3
1,3- Dichlorobenzene	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	-
1,1- Dichloroethane	10ND	0.37J	5
1,2- Dichloroethane	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	5
Ethylbenzene	10ND	10ND	5
2- Hexanone	10ND	10ND	50
Isopropylbenzene	10ND	10ND	-
Methyl Acetate	10ND	10ND	-
Methylcyclohexane	10ND	10ND	-
Methylene Chloride	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	5

**TABLE 9 Groundwater Analytical Summary**  
**Volatile Organic Compounds – Method OLM**

Volunteers of America of Western New York  
214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 8 of 8	VOAMW-105 (7/27/09)	VOAMW-106 (7/27/09)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	5
Tetrachloroethene	10ND	10ND	5
Toluene	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	5
Trichloroethene	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	-
Vinyl Chloride	10ND	10ND	2
M+P- Xylene	10ND	10ND	5
O- Xylene	10ND	10ND	5
Tentatively Identified Compounds Total and number detected	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standard.
2. - = No standards available and ND = non detection above the laboratory detection limits.
3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
4. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



**BERGMANN**  
ARCHITECTS ENGINEERS PLANNERS

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## APPENDIX 4



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

*Analytical Report For*  
**Bergmann Associates**

*For Lab Project ID*

**202600**

*Referencing*

**2020 Annual Sampling Event VOA 214 Lake Ave**

*Prepared*

**Thursday, June 25, 2020**

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

A handwritten signature in blue ink, appearing to read "R. D. G. D.", is written over a horizontal line.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-101

Lab Sample ID: 202600-01

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	< 0.000200	mg/L		6/17/2020 06:22
Method Reference(s):	EPA 7470A			
Preparation Date:	6/15/2020			
Data File:	Hg200617A			

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	< 0.100	mg/L		6/24/2020 14:28
Antimony	< 0.0600	mg/L		6/24/2020 14:28
Arsenic	<b>0.00932</b>	mg/L	J	6/24/2020 14:28
Barium	<b>0.216</b>	mg/L		6/24/2020 14:28
Beryllium	< 0.00500	mg/L		6/24/2020 14:28
Cadmium	< 0.00500	mg/L		6/24/2020 14:28
Calcium	<b>180</b>	mg/L		6/24/2020 14:28
Chromium	< 0.0100	mg/L		6/24/2020 14:28
Cobalt	< 0.0500	mg/L		6/24/2020 14:28
Copper	< 0.0200	mg/L		6/24/2020 14:28
Iron	<b>11.8</b>	mg/L		6/24/2020 14:28
Lead	< 0.0100	mg/L		6/24/2020 14:28
Magnesium	<b>43.4</b>	mg/L		6/24/2020 14:28
Manganese	<b>0.725</b>	mg/L		6/24/2020 14:28
Nickel	< 0.0400	mg/L		6/24/2020 14:28
Potassium	<b>10.3</b>	mg/L		6/24/2020 14:28
Selenium	< 0.0200	mg/L		6/24/2020 14:28
Silver	< 0.0100	mg/L		6/24/2020 14:28
Sodium	<b>176</b>	mg/L		6/24/2020 14:28
Thallium	< 0.0250	mg/L		6/24/2020 14:28
Vanadium	< 0.0250	mg/L		6/24/2020 14:28

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-101

Lab Sample ID: 202600-01

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 14:28

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.93	ug/L		6/17/2020 20:21
1,2,4,5-Tetrachlorobenzene	< 9.93	ug/L		6/17/2020 20:21
1,2,4-Trichlorobenzene	< 9.93	ug/L		6/17/2020 20:21
1,2-Dichlorobenzene	< 9.93	ug/L		6/17/2020 20:21
1,3-Dichlorobenzene	< 9.93	ug/L		6/17/2020 20:21
1,4-Dichlorobenzene	< 9.93	ug/L		6/17/2020 20:21
2,2-Oxybis (1-chloropropane)	< 9.93	ug/L		6/17/2020 20:21
2,3,4,6-Tetrachlorophenol	< 9.93	ug/L		6/17/2020 20:21
2,4,5-Trichlorophenol	< 19.9	ug/L		6/17/2020 20:21
2,4,6-Trichlorophenol	< 9.93	ug/L		6/17/2020 20:21
2,4-Dichlorophenol	< 9.93	ug/L		6/17/2020 20:21
2,4-Dimethylphenol	< 19.9	ug/L		6/17/2020 20:21
2,4-Dinitrophenol	< 19.9	ug/L		6/17/2020 20:21
2,4-Dinitrotoluene	< 9.93	ug/L		6/17/2020 20:21
2,6-Dinitrotoluene	< 9.93	ug/L		6/17/2020 20:21
2-Chloronaphthalene	< 9.93	ug/L		6/17/2020 20:21
2-Chlorophenol	< 9.93	ug/L		6/17/2020 20:21
2-Methylnaphthalene	< 9.93	ug/L		6/17/2020 20:21
2-Methylphenol	< 9.93	ug/L		6/17/2020 20:21
2-Nitroaniline	< 19.9	ug/L		6/17/2020 20:21
2-Nitrophenol	< 9.93	ug/L		6/17/2020 20:21
3&4-Methylphenol	< 9.93	ug/L		6/17/2020 20:21
3,3'-Dichlorobenzidine	< 9.93	ug/L		6/17/2020 20:21
3-Nitroaniline	< 19.9	ug/L		6/17/2020 20:21

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-101		
Lab Sample ID:	202600-01	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.9	ug/L	6/17/2020 20:21
4-Bromophenyl phenyl ether	< 9.93	ug/L	6/17/2020 20:21
4-Chloro-3-methylphenol	< 9.93	ug/L	6/17/2020 20:21
4-Chloroaniline	< 9.93	ug/L	6/17/2020 20:21
4-Chlorophenyl phenyl ether	< 9.93	ug/L	6/17/2020 20:21
4-Nitroaniline	< 19.9	ug/L	6/17/2020 20:21
4-Nitrophenol	< 19.9	ug/L	6/17/2020 20:21
Acenaphthene	< 9.93	ug/L	6/17/2020 20:21
Acenaphthylene	< 9.93	ug/L	6/17/2020 20:21
Acetophenone	< 9.93	ug/L	6/17/2020 20:21
Anthracene	< 9.93	ug/L	6/17/2020 20:21
Atrazine	< 9.93	ug/L	6/17/2020 20:21
Benzaldehyde	< 9.93	ug/L	6/17/2020 20:21
Benzo (a) anthracene	< 9.93	ug/L	6/17/2020 20:21
Benzo (a) pyrene	< 9.93	ug/L	6/17/2020 20:21
Benzo (b) fluoranthene	< 9.93	ug/L	6/17/2020 20:21
Benzo (g,h,i) perylene	< 9.93	ug/L	6/17/2020 20:21
Benzo (k) fluoranthene	< 9.93	ug/L	6/17/2020 20:21
Bis (2-chloroethoxy) methane	< 9.93	ug/L	6/17/2020 20:21
Bis (2-chloroethyl) ether	< 9.93	ug/L	6/17/2020 20:21
Bis (2-ethylhexyl) phthalate	< 9.93	ug/L	6/17/2020 20:21
Butylbenzylphthalate	< 9.93	ug/L	6/17/2020 20:21
Caprolactam	< 9.93	ug/L	6/17/2020 20:21
Carbazole	< 9.93	ug/L	6/17/2020 20:21
Chrysene	< 9.93	ug/L	6/17/2020 20:21
Dibenz (a,h) anthracene	< 9.93	ug/L	6/17/2020 20:21
Dibenzofuran	< 9.93	ug/L	6/17/2020 20:21
Diethyl phthalate	< 9.93	ug/L	6/17/2020 20:21
Dimethyl phthalate	< 19.9	ug/L	6/17/2020 20:21
Di-n-butyl phthalate	< 9.93	ug/L	6/17/2020 20:21

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-101		
Lab Sample ID:	202600-01	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

Di-n-octylphthalate	< 9.93	ug/L	6/17/2020 20:21
Fluoranthene	< 9.93	ug/L	6/17/2020 20:21
Fluorene	< 9.93	ug/L	6/17/2020 20:21
Hexachlorobenzene	< 9.93	ug/L	6/17/2020 20:21
Hexachlorobutadiene	< 9.93	ug/L	6/17/2020 20:21
Hexachlorocyclopentadiene	< 9.93	ug/L	6/17/2020 20:21
Hexachloroethane	< 9.93	ug/L	6/17/2020 20:21
Indeno (1,2,3-cd) pyrene	< 9.93	ug/L	6/17/2020 20:21
Isophorone	< 9.93	ug/L	6/17/2020 20:21
Naphthalene	< 9.93	ug/L	6/17/2020 20:21
Nitrobenzene	< 9.93	ug/L	6/17/2020 20:21
N-Nitroso-di-n-propylamine	< 9.93	ug/L	6/17/2020 20:21
N-Nitrosodiphenylamine	< 9.93	ug/L	6/17/2020 20:21
Pentachlorophenol	< 19.9	ug/L	6/17/2020 20:21
Phenanthrene	< 9.93	ug/L	6/17/2020 20:21
Phenol	< 9.93	ug/L	6/17/2020 20:21
Pyrene	< 9.93	ug/L	6/17/2020 20:21

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	74.4	61.4 - 115		6/17/2020 20:21
2-Fluorobiphenyl	64.6	38.4 - 101		6/17/2020 20:21
2-Fluorophenol	29.7	12.7 - 105		6/17/2020 20:21
Nitrobenzene-d5	74.3	57.3 - 100		6/17/2020 20:21
Phenol-d5	21.3	10 - 107		6/17/2020 20:21
Terphenyl-d14	72.9	58.1 - 117		6/17/2020 20:21

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 6/17/2020  
Data File: B47201.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 17:30

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-101		
Lab Sample ID:	202600-01	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 17:30
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 17:30
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 17:30
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 17:30
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 17:30
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 17:30
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 17:30
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 17:30
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 17:30
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 17:30
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 17:30
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 17:30
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 17:30
1,4-Dioxane	< 20.0	ug/L	6/24/2020 17:30
2-Butanone	< 10.0	ug/L	6/24/2020 17:30
2-Hexanone	< 5.00	ug/L	6/24/2020 17:30
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 17:30
Acetone	< 10.0	ug/L	6/24/2020 17:30
Benzene	< 1.00	ug/L	6/24/2020 17:30
Bromochloromethane	< 5.00	ug/L	6/24/2020 17:30
Bromodichloromethane	< 2.00	ug/L	6/24/2020 17:30
Bromoform	< 5.00	ug/L	6/24/2020 17:30
Bromomethane	< 2.00	ug/L	6/24/2020 17:30
Carbon disulfide	< 2.00	ug/L	6/24/2020 17:30
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 17:30
Chlorobenzene	< 2.00	ug/L	6/24/2020 17:30
Chloroethane	< 2.00	ug/L	6/24/2020 17:30
Chloroform	< 2.00	ug/L	6/24/2020 17:30
Chloromethane	< 2.00	ug/L	6/24/2020 17:30
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 17:30

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-101		
Lab Sample ID:	202600-01	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 17:30
Cyclohexane	< 10.0	ug/L	6/24/2020 17:30
Dibromochloromethane	< 2.00	ug/L	6/24/2020 17:30
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 17:30
Ethylbenzene	< 2.00	ug/L	6/24/2020 17:30
Freon 113	< 2.00	ug/L	6/24/2020 17:30
Isopropylbenzene	< 2.00	ug/L	6/24/2020 17:30
m,p-Xylene	< 2.00	ug/L	6/24/2020 17:30
Methyl acetate	< 2.00	ug/L	6/24/2020 17:30
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 17:30
Methylcyclohexane	< 2.00	ug/L	6/24/2020 17:30
Methylene chloride	< 5.00	ug/L	6/24/2020 17:30
o-Xylene	< 2.00	ug/L	6/24/2020 17:30
Styrene	< 5.00	ug/L	6/24/2020 17:30
Tetrachloroethene	< 2.00	ug/L	6/24/2020 17:30
Toluene	< 2.00	ug/L	6/24/2020 17:30
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 17:30
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 17:30
Trichloroethene	< 2.00	ug/L	6/24/2020 17:30
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 17:30
Vinyl chloride	< 2.00	ug/L	6/24/2020 17:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	138	80.8 - 132	*	6/24/2020 17:30
4-Bromofluorobenzene	59.8	56.6 - 130		6/24/2020 17:30
Pentafluorobenzene	100	87.4 - 113		6/24/2020 17:30
Toluene-D8	74.6	82.2 - 115	*	6/24/2020 17:30

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x71230a.D

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MWR-101

Lab Sample ID: 202600-02

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	0.000313	mg/L		6/17/2020 06:28

Method Reference(s): EPA 7470A

Preparation Date: 6/15/2020

Data File: Hg200617A

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	1.87	mg/L		6/24/2020 14:32
Antimony	< 0.0600	mg/L		6/24/2020 14:32
Arsenic	0.00910	mg/L	J	6/24/2020 14:32
Barium	< 0.100	mg/L		6/24/2020 14:32
Beryllium	< 0.00500	mg/L		6/24/2020 14:32
Cadmium	< 0.00500	mg/L		6/24/2020 14:32
Calcium	5.54	mg/L		6/24/2020 14:32
Chromium	< 0.0100	mg/L		6/24/2020 14:32
Cobalt	< 0.0500	mg/L		6/24/2020 14:32
Copper	< 0.0200	mg/L		6/24/2020 14:32
Iron	1.26	mg/L		6/24/2020 14:32
Lead	0.0135	mg/L		6/24/2020 14:32
Magnesium	< 2.50	mg/L		6/24/2020 14:32
Manganese	0.0158	mg/L		6/24/2020 14:32
Nickel	< 0.0400	mg/L		6/24/2020 14:32
Potassium	1.47	mg/L	J	6/24/2020 14:32
Selenium	< 0.0200	mg/L		6/24/2020 14:32
Silver	< 0.0100	mg/L		6/24/2020 14:32
Sodium	158	mg/L		6/24/2020 14:32
Thallium	< 0.0250	mg/L		6/24/2020 14:32
Vanadium	< 0.0250	mg/L		6/24/2020 14:32

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MWR-101

Lab Sample ID: 202600-02

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc 0.0434 mg/L J 6/24/2020 14:32

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.82	ug/L		6/17/2020 20:51
1,2,4,5-Tetrachlorobenzene	< 9.82	ug/L		6/17/2020 20:51
1,2,4-Trichlorobenzene	< 9.82	ug/L		6/17/2020 20:51
1,2-Dichlorobenzene	< 9.82	ug/L		6/17/2020 20:51
1,3-Dichlorobenzene	< 9.82	ug/L		6/17/2020 20:51
1,4-Dichlorobenzene	< 9.82	ug/L		6/17/2020 20:51
2,2-Oxybis (1-chloropropane)	< 9.82	ug/L		6/17/2020 20:51
2,3,4,6-Tetrachlorophenol	< 9.82	ug/L		6/17/2020 20:51
2,4,5-Trichlorophenol	< 19.6	ug/L		6/17/2020 20:51
2,4,6-Trichlorophenol	< 9.82	ug/L		6/17/2020 20:51
2,4-Dichlorophenol	< 9.82	ug/L		6/17/2020 20:51
2,4-Dimethylphenol	< 19.6	ug/L		6/17/2020 20:51
2,4-Dinitrophenol	< 19.6	ug/L		6/17/2020 20:51
2,4-Dinitrotoluene	< 9.82	ug/L		6/17/2020 20:51
2,6-Dinitrotoluene	< 9.82	ug/L		6/17/2020 20:51
2-Chloronaphthalene	< 9.82	ug/L		6/17/2020 20:51
2-Chlorophenol	< 9.82	ug/L		6/17/2020 20:51
2-Methylnaphthalene	< 9.82	ug/L		6/17/2020 20:51
2-Methylphenol	< 9.82	ug/L		6/17/2020 20:51
2-Nitroaniline	< 19.6	ug/L		6/17/2020 20:51
2-Nitrophenol	< 9.82	ug/L		6/17/2020 20:51
3&4-Methylphenol	< 9.82	ug/L		6/17/2020 20:51
3,3'-Dichlorobenzidine	< 9.82	ug/L		6/17/2020 20:51
3-Nitroaniline	< 19.6	ug/L		6/17/2020 20:51

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MWR-101		
Lab Sample ID:	202600-02	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.6	ug/L	6/17/2020 20:51
4-Bromophenyl phenyl ether	< 9.82	ug/L	6/17/2020 20:51
4-Chloro-3-methylphenol	< 9.82	ug/L	6/17/2020 20:51
4-Chloroaniline	< 9.82	ug/L	6/17/2020 20:51
4-Chlorophenyl phenyl ether	< 9.82	ug/L	6/17/2020 20:51
4-Nitroaniline	< 19.6	ug/L	6/17/2020 20:51
4-Nitrophenol	< 19.6	ug/L	6/17/2020 20:51
Acenaphthene	< 9.82	ug/L	6/17/2020 20:51
Acenaphthylene	< 9.82	ug/L	6/17/2020 20:51
Acetophenone	< 9.82	ug/L	6/17/2020 20:51
Anthracene	< 9.82	ug/L	6/17/2020 20:51
Atrazine	< 9.82	ug/L	6/17/2020 20:51
Benzaldehyde	< 9.82	ug/L	6/17/2020 20:51
Benzo (a) anthracene	< 9.82	ug/L	6/17/2020 20:51
Benzo (a) pyrene	< 9.82	ug/L	6/17/2020 20:51
Benzo (b) fluoranthene	< 9.82	ug/L	6/17/2020 20:51
Benzo (g,h,i) perylene	< 9.82	ug/L	6/17/2020 20:51
Benzo (k) fluoranthene	< 9.82	ug/L	6/17/2020 20:51
Bis (2-chloroethoxy) methane	< 9.82	ug/L	6/17/2020 20:51
Bis (2-chloroethyl) ether	< 9.82	ug/L	6/17/2020 20:51
Bis (2-ethylhexyl) phthalate	< 9.82	ug/L	6/17/2020 20:51
Butylbenzylphthalate	< 9.82	ug/L	6/17/2020 20:51
Caprolactam	< 9.82	ug/L	6/17/2020 20:51
Carbazole	< 9.82	ug/L	6/17/2020 20:51
Chrysene	< 9.82	ug/L	6/17/2020 20:51
Dibenz (a,h) anthracene	< 9.82	ug/L	6/17/2020 20:51
Dibenzofuran	< 9.82	ug/L	6/17/2020 20:51
Diethyl phthalate	< 9.82	ug/L	6/17/2020 20:51
Dimethyl phthalate	< 19.6	ug/L	6/17/2020 20:51
Di-n-butyl phthalate	< 9.82	ug/L	6/17/2020 20:51

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MWR-101

Lab Sample ID: 202600-02

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Di-n-octylphthalate	< 9.82	ug/L	6/17/2020 20:51
Fluoranthene	< 9.82	ug/L	6/17/2020 20:51
Fluorene	< 9.82	ug/L	6/17/2020 20:51
Hexachlorobenzene	< 9.82	ug/L	6/17/2020 20:51
Hexachlorobutadiene	< 9.82	ug/L	6/17/2020 20:51
Hexachlorocyclopentadiene	< 9.82	ug/L	6/17/2020 20:51
Hexachloroethane	< 9.82	ug/L	6/17/2020 20:51
Indeno (1,2,3-cd) pyrene	< 9.82	ug/L	6/17/2020 20:51
Isophorone	< 9.82	ug/L	6/17/2020 20:51
Naphthalene	< 9.82	ug/L	6/17/2020 20:51
Nitrobenzene	< 9.82	ug/L	6/17/2020 20:51
N-Nitroso-di-n-propylamine	< 9.82	ug/L	6/17/2020 20:51
N-Nitrosodiphenylamine	< 9.82	ug/L	6/17/2020 20:51
Pentachlorophenol	< 19.6	ug/L	6/17/2020 20:51
Phenanthrene	< 9.82	ug/L	6/17/2020 20:51
Phenol	< 9.82	ug/L	6/17/2020 20:51
Pyrene	< 9.82	ug/L	6/17/2020 20:51

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	51.4	61.4 - 115	*	6/17/2020 20:51
2-Fluorobiphenyl	61.9	38.4 - 101		6/17/2020 20:51
2-Fluorophenol	24.1	12.7 - 105		6/17/2020 20:51
Nitrobenzene-d5	76.0	57.3 - 100		6/17/2020 20:51
Phenol-d5	18.5	10 - 107		6/17/2020 20:51
Terphenyl-d14	65.0	58.1 - 117		6/17/2020 20:51

Method Reference(s): EPA 8270D

EPA 3510C

Preparation Date: 6/17/2020

Data File: B47202.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 17:52

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MWR-101		
Lab Sample ID:	202600-02	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 17:52
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 17:52
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 17:52
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 17:52
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 17:52
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 17:52
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 17:52
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 17:52
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 17:52
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 17:52
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 17:52
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 17:52
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 17:52
1,4-Dioxane	< 20.0	ug/L	6/24/2020 17:52
2-Butanone	< 10.0	ug/L	6/24/2020 17:52
2-Hexanone	< 5.00	ug/L	6/24/2020 17:52
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 17:52
Acetone	< 10.0	ug/L	6/24/2020 17:52
Benzene	< 1.00	ug/L	6/24/2020 17:52
Bromochloromethane	< 5.00	ug/L	6/24/2020 17:52
Bromodichloromethane	< 2.00	ug/L	6/24/2020 17:52
Bromoform	< 5.00	ug/L	6/24/2020 17:52
Bromomethane	< 2.00	ug/L	6/24/2020 17:52
Carbon disulfide	< 2.00	ug/L	6/24/2020 17:52
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 17:52
Chlorobenzene	< 2.00	ug/L	6/24/2020 17:52
Chloroethane	< 2.00	ug/L	6/24/2020 17:52
Chloroform	< 2.00	ug/L	6/24/2020 17:52
Chloromethane	< 2.00	ug/L	6/24/2020 17:52
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 17:52

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Report Prepared Thursday, June 25, 2020





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MWR-101

Lab Sample ID: 202600-02

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 17:52
Cyclohexane	< 10.0	ug/L	6/24/2020 17:52
Dibromochloromethane	< 2.00	ug/L	6/24/2020 17:52
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 17:52
Ethylbenzene	< 2.00	ug/L	6/24/2020 17:52
Freon 113	< 2.00	ug/L	6/24/2020 17:52
Isopropylbenzene	< 2.00	ug/L	6/24/2020 17:52
m,p-Xylene	< 2.00	ug/L	6/24/2020 17:52
Methyl acetate	< 2.00	ug/L	6/24/2020 17:52
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 17:52
Methylcyclohexane	< 2.00	ug/L	6/24/2020 17:52
Methylene chloride	< 5.00	ug/L	6/24/2020 17:52
o-Xylene	< 2.00	ug/L	6/24/2020 17:52
Styrene	< 5.00	ug/L	6/24/2020 17:52
Tetrachloroethene	< 2.00	ug/L	6/24/2020 17:52
Toluene	< 2.00	ug/L	6/24/2020 17:52
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 17:52
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 17:52
Trichloroethene	< 2.00	ug/L	6/24/2020 17:52
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 17:52
Vinyl chloride	< 2.00	ug/L	6/24/2020 17:52

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	125	80.8 - 132		6/24/2020 17:52
4-Bromofluorobenzene	57.2	56.6 - 130		6/24/2020 17:52
Pentafluorobenzene	97.9	87.4 - 113		6/24/2020 17:52
Toluene-D8	76.5	82.2 - 115	*	6/24/2020 17:52

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x71231.D

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-103

Lab Sample ID: 202600-03

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	< 0.000200	mg/L		6/17/2020 06:30
Method Reference(s): EPA 7470A				
Preparation Date: 6/15/2020				
Data File: Hg200617A				

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	< 0.100	mg/L		6/24/2020 14:37
Antimony	< 0.0600	mg/L		6/24/2020 14:37
Arsenic	<b>0.0151</b>	mg/L		6/24/2020 07:29
Barium	<b>0.262</b>	mg/L		6/24/2020 14:37
Beryllium	< 0.00500	mg/L		6/24/2020 14:37
Cadmium	< 0.00500	mg/L		6/24/2020 14:37
Calcium	<b>182</b>	mg/L		6/24/2020 14:37
Chromium	<b>0.0344</b>	mg/L		6/24/2020 14:37
Cobalt	< 0.0500	mg/L		6/24/2020 14:37
Copper	< 0.0200	mg/L		6/24/2020 14:37
Iron	<b>12.6</b>	mg/L		6/24/2020 14:37
Lead	< 0.0100	mg/L		6/24/2020 14:37
Magnesium	<b>37.8</b>	mg/L		6/24/2020 14:37
Manganese	<b>0.534</b>	mg/L		6/24/2020 14:37
Nickel	< 0.0400	mg/L		6/24/2020 14:37
Potassium	<b>11.7</b>	mg/L		6/24/2020 14:37
Selenium	< 0.0200	mg/L		6/24/2020 14:37
Silver	< 0.0100	mg/L		6/24/2020 14:37
Sodium	<b>227</b>	mg/L		6/24/2020 14:37
Thallium	< 0.0250	mg/L		6/24/2020 14:37
Vanadium	< 0.0250	mg/L		6/24/2020 14:37



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-103

Lab Sample ID: 202600-03

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 14:37

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 10.0	ug/L		6/17/2020 21:20
1,2,4,5-Tetrachlorobenzene	< 10.0	ug/L		6/17/2020 21:20
1,2,4-Trichlorobenzene	< 10.0	ug/L		6/17/2020 21:20
1,2-Dichlorobenzene	< 10.0	ug/L		6/17/2020 21:20
1,3-Dichlorobenzene	< 10.0	ug/L		6/17/2020 21:20
1,4-Dichlorobenzene	< 10.0	ug/L		6/17/2020 21:20
2,2-Oxybis (1-chloropropane)	< 10.0	ug/L		6/17/2020 21:20
2,3,4,6-Tetrachlorophenol	< 10.0	ug/L		6/17/2020 21:20
2,4,5-Trichlorophenol	< 20.0	ug/L		6/17/2020 21:20
2,4,6-Trichlorophenol	< 10.0	ug/L		6/17/2020 21:20
2,4-Dichlorophenol	< 10.0	ug/L		6/17/2020 21:20
2,4-Dimethylphenol	< 20.0	ug/L		6/17/2020 21:20
2,4-Dinitrophenol	< 20.0	ug/L		6/17/2020 21:20
2,4-Dinitrotoluene	< 10.0	ug/L		6/17/2020 21:20
2,6-Dinitrotoluene	< 10.0	ug/L		6/17/2020 21:20
2-Chloronaphthalene	< 10.0	ug/L		6/17/2020 21:20
2-Chlorophenol	< 10.0	ug/L		6/17/2020 21:20
2-Methylnaphthalene	< 10.0	ug/L		6/17/2020 21:20
2-Methylphenol	< 10.0	ug/L		6/17/2020 21:20
2-Nitroaniline	< 20.0	ug/L		6/17/2020 21:20
2-Nitrophenol	< 10.0	ug/L		6/17/2020 21:20
3&4-Methylphenol	< 10.0	ug/L		6/17/2020 21:20
3,3'-Dichlorobenzidine	< 10.0	ug/L		6/17/2020 21:20
3-Nitroaniline	< 20.0	ug/L		6/17/2020 21:20

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-103		
Lab Sample ID:	202600-03	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

4,6-Dinitro-2-methylphenol	< 20.0	ug/L	6/17/2020 21:20
4-Bromophenyl phenyl ether	< 10.0	ug/L	6/17/2020 21:20
4-Chloro-3-methylphenol	< 10.0	ug/L	6/17/2020 21:20
4-Chloroaniline	< 10.0	ug/L	6/17/2020 21:20
4-Chlorophenyl phenyl ether	< 10.0	ug/L	6/17/2020 21:20
4-Nitroaniline	< 20.0	ug/L	6/17/2020 21:20
4-Nitrophenol	< 20.0	ug/L	6/17/2020 21:20
Acenaphthene	< 10.0	ug/L	6/17/2020 21:20
Acenaphthylene	< 10.0	ug/L	6/17/2020 21:20
Acetophenone	< 10.0	ug/L	6/17/2020 21:20
Anthracene	< 10.0	ug/L	6/17/2020 21:20
Atrazine	< 10.0	ug/L	6/17/2020 21:20
Benzaldehyde	< 10.0	ug/L	6/17/2020 21:20
Benzo (a) anthracene	< 10.0	ug/L	6/17/2020 21:20
Benzo (a) pyrene	< 10.0	ug/L	6/17/2020 21:20
Benzo (b) fluoranthene	< 10.0	ug/L	6/17/2020 21:20
Benzo (g,h,i) perylene	< 10.0	ug/L	6/17/2020 21:20
Benzo (k) fluoranthene	< 10.0	ug/L	6/17/2020 21:20
Bis (2-chloroethoxy) methane	< 10.0	ug/L	6/17/2020 21:20
Bis (2-chloroethyl) ether	< 10.0	ug/L	6/17/2020 21:20
Bis (2-ethylhexyl) phthalate	< 10.0	ug/L	6/17/2020 21:20
Butylbenzylphthalate	< 10.0	ug/L	6/17/2020 21:20
Caprolactam	< 10.0	ug/L	6/17/2020 21:20
Carbazole	< 10.0	ug/L	6/17/2020 21:20
Chrysene	< 10.0	ug/L	6/17/2020 21:20
Dibenz (a,h) anthracene	< 10.0	ug/L	6/17/2020 21:20
Dibenzofuran	< 10.0	ug/L	6/17/2020 21:20
Diethyl phthalate	< 10.0	ug/L	6/17/2020 21:20
Dimethyl phthalate	< 20.0	ug/L	6/17/2020 21:20
Di-n-butyl phthalate	< 10.0	ug/L	6/17/2020 21:20

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-103

Lab Sample ID: 202600-03

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Di-n-octylphthalate	< 10.0	ug/L	6/17/2020 21:20
Fluoranthene	< 10.0	ug/L	6/17/2020 21:20
Fluorene	< 10.0	ug/L	6/17/2020 21:20
Hexachlorobenzene	< 10.0	ug/L	6/17/2020 21:20
Hexachlorobutadiene	< 10.0	ug/L	6/17/2020 21:20
Hexachlorocyclopentadiene	< 10.0	ug/L	6/17/2020 21:20
Hexachloroethane	< 10.0	ug/L	6/17/2020 21:20
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L	6/17/2020 21:20
Isophorone	< 10.0	ug/L	6/17/2020 21:20
Naphthalene	< 10.0	ug/L	6/17/2020 21:20
Nitrobenzene	< 10.0	ug/L	6/17/2020 21:20
N-Nitroso-di-n-propylamine	< 10.0	ug/L	6/17/2020 21:20
N-Nitrosodiphenylamine	< 10.0	ug/L	6/17/2020 21:20
Pentachlorophenol	< 20.0	ug/L	6/17/2020 21:20
Phenanthrene	< 10.0	ug/L	6/17/2020 21:20
Phenol	< 10.0	ug/L	6/17/2020 21:20
Pyrene	< 10.0	ug/L	6/17/2020 21:20

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	65.8	61.4 - 115		6/17/2020 21:20
2-Fluorobiphenyl	50.5	38.4 - 101		6/17/2020 21:20
2-Fluorophenol	29.4	12.7 - 105		6/17/2020 21:20
Nitrobenzene-d5	59.1	57.3 - 100		6/17/2020 21:20
Phenol-d5	21.3	10 - 107		6/17/2020 21:20
Terphenyl-d14	66.1	58.1 - 117		6/17/2020 21:20

Method Reference(s): EPA 8270D

EPA 3510C

Preparation Date: 6/17/2020

Data File: B47203.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 18:15

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Report Prepared Thursday, June 25, 2020





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-103		
Lab Sample ID:	202600-03	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 18:15
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 18:15
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 18:15
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 18:15
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 18:15
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 18:15
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 18:15
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 18:15
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:15
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 18:15
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 18:15
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:15
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:15
1,4-Dioxane	< 20.0	ug/L	6/24/2020 18:15
2-Butanone	< 10.0	ug/L	6/24/2020 18:15
2-Hexanone	< 5.00	ug/L	6/24/2020 18:15
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 18:15
Acetone	< 10.0	ug/L	6/24/2020 18:15
Benzene	< 1.00	ug/L	6/24/2020 18:15
Bromochloromethane	< 5.00	ug/L	6/24/2020 18:15
Bromodichloromethane	< 2.00	ug/L	6/24/2020 18:15
Bromoform	< 5.00	ug/L	6/24/2020 18:15
Bromomethane	< 2.00	ug/L	6/24/2020 18:15
Carbon disulfide	< 2.00	ug/L	6/24/2020 18:15
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 18:15
Chlorobenzene	< 2.00	ug/L	6/24/2020 18:15
Chloroethane	< 2.00	ug/L	6/24/2020 18:15
Chloroform	< 2.00	ug/L	6/24/2020 18:15
Chloromethane	< 2.00	ug/L	6/24/2020 18:15
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 18:15

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-103		
Lab Sample ID:	202600-03	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 18:15
Cyclohexane	< 10.0	ug/L	6/24/2020 18:15
Dibromochloromethane	< 2.00	ug/L	6/24/2020 18:15
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 18:15
Ethylbenzene	< 2.00	ug/L	6/24/2020 18:15
Freon 113	< 2.00	ug/L	6/24/2020 18:15
Isopropylbenzene	< 2.00	ug/L	6/24/2020 18:15
m,p-Xylene	< 2.00	ug/L	6/24/2020 18:15
Methyl acetate	< 2.00	ug/L	6/24/2020 18:15
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 18:15
Methylcyclohexane	< 2.00	ug/L	6/24/2020 18:15
Methylene chloride	< 5.00	ug/L	6/24/2020 18:15
o-Xylene	< 2.00	ug/L	6/24/2020 18:15
Styrene	< 5.00	ug/L	6/24/2020 18:15
Tetrachloroethene	< 2.00	ug/L	6/24/2020 18:15
Toluene	< 2.00	ug/L	6/24/2020 18:15
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 18:15
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 18:15
Trichloroethene	< 2.00	ug/L	6/24/2020 18:15
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 18:15
Vinyl chloride	< 2.00	ug/L	6/24/2020 18:15

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	136	80.8 - 132	*	6/24/2020 18:15
4-Bromofluorobenzene	58.2	56.6 - 130		6/24/2020 18:15
Pentafluorobenzene	98.6	87.4 - 113		6/24/2020 18:15
Toluene-D8	74.6	82.2 - 115	*	6/24/2020 18:15

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x71232.D

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-102

Lab Sample ID: 202600-04

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	< 0.000200	mg/L		6/17/2020 06:32
Method Reference(s):	EPA 7470A			
Preparation Date:	6/15/2020			
Data File:	Hg200617A			

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	< 0.100	mg/L		6/24/2020 14:41
Antimony	< 0.0600	mg/L		6/24/2020 14:41
Arsenic	<b>0.0122</b>	mg/L		6/24/2020 07:33
Barium	<b>0.484</b>	mg/L		6/24/2020 14:41
Beryllium	< 0.00500	mg/L		6/24/2020 14:41
Cadmium	< 0.00500	mg/L		6/24/2020 14:41
Calcium	<b>698</b>	mg/L		6/24/2020 15:36
Chromium	< 0.0100	mg/L		6/24/2020 14:41
Cobalt	< 0.0500	mg/L		6/24/2020 14:41
Copper	< 0.0200	mg/L		6/24/2020 14:41
Iron	<b>10.9</b>	mg/L		6/24/2020 14:41
Lead	< 0.0100	mg/L		6/24/2020 14:41
Magnesium	<b>185</b>	mg/L		6/24/2020 14:41
Manganese	<b>1.73</b>	mg/L		6/24/2020 14:41
Nickel	< 0.0400	mg/L		6/24/2020 14:41
Potassium	<b>55.4</b>	mg/L		6/24/2020 14:41
Selenium	< 0.0200	mg/L		6/24/2020 14:41
Silver	<b>0.00513</b>	mg/L	J	6/24/2020 14:41
Sodium	<b>1580</b>	mg/L		6/24/2020 15:36
Thallium	<b>0.0171</b>	mg/L	J	6/24/2020 14:41
Vanadium	< 0.0250	mg/L		6/24/2020 14:41

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-102

Lab Sample ID: 202600-04

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 14:41

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.71	ug/L		6/17/2020 21:50
1,2,4,5-Tetrachlorobenzene	< 9.71	ug/L		6/17/2020 21:50
1,2,4-Trichlorobenzene	< 9.71	ug/L		6/17/2020 21:50
1,2-Dichlorobenzene	< 9.71	ug/L		6/17/2020 21:50
1,3-Dichlorobenzene	< 9.71	ug/L		6/17/2020 21:50
1,4-Dichlorobenzene	< 9.71	ug/L		6/17/2020 21:50
2,2-Oxybis (1-chloropropane)	< 9.71	ug/L		6/17/2020 21:50
2,3,4,6-Tetrachlorophenol	< 9.71	ug/L		6/17/2020 21:50
2,4,5-Trichlorophenol	< 19.4	ug/L		6/17/2020 21:50
2,4,6-Trichlorophenol	< 9.71	ug/L		6/17/2020 21:50
2,4-Dichlorophenol	< 9.71	ug/L		6/17/2020 21:50
2,4-Dimethylphenol	< 19.4	ug/L		6/17/2020 21:50
2,4-Dinitrophenol	< 19.4	ug/L		6/17/2020 21:50
2,4-Dinitrotoluene	< 9.71	ug/L		6/17/2020 21:50
2,6-Dinitrotoluene	< 9.71	ug/L		6/17/2020 21:50
2-Chloronaphthalene	< 9.71	ug/L		6/17/2020 21:50
2-Chlorophenol	< 9.71	ug/L		6/17/2020 21:50
2-Methylnaphthalene	< 9.71	ug/L		6/17/2020 21:50
2-Methylphenol	< 9.71	ug/L		6/17/2020 21:50
2-Nitroaniline	< 19.4	ug/L		6/17/2020 21:50
2-Nitrophenol	< 9.71	ug/L		6/17/2020 21:50
3&4-Methylphenol	< 9.71	ug/L		6/17/2020 21:50
3,3'-Dichlorobenzidine	< 9.71	ug/L		6/17/2020 21:50
3-Nitroaniline	< 19.4	ug/L		6/17/2020 21:50

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Report Prepared Thursday, June 25, 2020

**Lab Project ID: 202600**
**Client:** **Bergmann Associates**
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

<b>Sample Identifier:</b>	MW-102		
<b>Lab Sample ID:</b>	202600-04	<b>Date Sampled:</b>	6/11/2020
<b>Matrix:</b>	Groundwater	<b>Date Received:</b>	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.4	ug/L	6/17/2020 21:50
4-Bromophenyl phenyl ether	< 9.71	ug/L	6/17/2020 21:50
4-Chloro-3-methylphenol	< 9.71	ug/L	6/17/2020 21:50
4-Chloroaniline	< 9.71	ug/L	6/17/2020 21:50
4-Chlorophenyl phenyl ether	< 9.71	ug/L	6/17/2020 21:50
4-Nitroaniline	< 19.4	ug/L	6/17/2020 21:50
4-Nitrophenol	< 19.4	ug/L	6/17/2020 21:50
Acenaphthene	< 9.71	ug/L	6/17/2020 21:50
Acenaphthylene	< 9.71	ug/L	6/17/2020 21:50
Acetophenone	< 9.71	ug/L	6/17/2020 21:50
Anthracene	< 9.71	ug/L	6/17/2020 21:50
Atrazine	< 9.71	ug/L	6/17/2020 21:50
Benzaldehyde	< 9.71	ug/L	6/17/2020 21:50
Benzo (a) anthracene	< 9.71	ug/L	6/17/2020 21:50
Benzo (a) pyrene	< 9.71	ug/L	6/17/2020 21:50
Benzo (b) fluoranthene	< 9.71	ug/L	6/17/2020 21:50
Benzo (g,h,i) perylene	< 9.71	ug/L	6/17/2020 21:50
Benzo (k) fluoranthene	< 9.71	ug/L	6/17/2020 21:50
Bis (2-chloroethoxy) methane	< 9.71	ug/L	6/17/2020 21:50
Bis (2-chloroethyl) ether	< 9.71	ug/L	6/17/2020 21:50
Bis (2-ethylhexyl) phthalate	< 9.71	ug/L	6/17/2020 21:50
Butylbenzylphthalate	< 9.71	ug/L	6/17/2020 21:50
Caprolactam	< 9.71	ug/L	6/17/2020 21:50
Carbazole	< 9.71	ug/L	6/17/2020 21:50
Chrysene	< 9.71	ug/L	6/17/2020 21:50
Dibenz (a,h) anthracene	< 9.71	ug/L	6/17/2020 21:50
Dibenzofuran	< 9.71	ug/L	6/17/2020 21:50
Diethyl phthalate	< 9.71	ug/L	6/17/2020 21:50
Dimethyl phthalate	< 19.4	ug/L	6/17/2020 21:50
Di-n-butyl phthalate	< 9.71	ug/L	6/17/2020 21:50





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-102		
Lab Sample ID:	202600-04	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

Di-n-octylphthalate	< 9.71	ug/L	6/17/2020 21:50
Fluoranthene	< 9.71	ug/L	6/17/2020 21:50
Fluorene	< 9.71	ug/L	6/17/2020 21:50
Hexachlorobenzene	< 9.71	ug/L	6/17/2020 21:50
Hexachlorobutadiene	< 9.71	ug/L	6/17/2020 21:50
Hexachlorocyclopentadiene	< 9.71	ug/L	6/17/2020 21:50
Hexachloroethane	< 9.71	ug/L	6/17/2020 21:50
Indeno (1,2,3-cd) pyrene	< 9.71	ug/L	6/17/2020 21:50
Isophorone	< 9.71	ug/L	6/17/2020 21:50
Naphthalene	< 9.71	ug/L	6/17/2020 21:50
Nitrobenzene	< 9.71	ug/L	6/17/2020 21:50
N-Nitroso-di-n-propylamine	< 9.71	ug/L	6/17/2020 21:50
N-Nitrosodiphenylamine	< 9.71	ug/L	6/17/2020 21:50
Pentachlorophenol	< 19.4	ug/L	6/17/2020 21:50
Phenanthrene	< 9.71	ug/L	6/17/2020 21:50
Phenol	< 9.71	ug/L	6/17/2020 21:50
Pyrene	< 9.71	ug/L	6/17/2020 21:50

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	71.2	61.4 - 115		6/17/2020 21:50
2-Fluorobiphenyl	62.6	38.4 - 101		6/17/2020 21:50
2-Fluorophenol	28.2	12.7 - 105		6/17/2020 21:50
Nitrobenzene-d5	73.7	57.3 - 100		6/17/2020 21:50
Phenol-d5	21.6	10 - 107		6/17/2020 21:50
Terphenyl-d14	61.4	58.1 - 117		6/17/2020 21:50

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 6/17/2020  
Data File: B47204.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 18:37

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-102

Lab Sample ID: 202600-04

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 18:37
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 18:37
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 18:37
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 18:37
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 18:37
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 18:37
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 18:37
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 18:37
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:37
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 18:37
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 18:37
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:37
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:37
1,4-Dioxane	< 20.0	ug/L	6/24/2020 18:37
2-Butanone	< 10.0	ug/L	6/24/2020 18:37
2-Hexanone	< 5.00	ug/L	6/24/2020 18:37
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 18:37
Acetone	< 10.0	ug/L	6/24/2020 18:37
Benzene	< 1.00	ug/L	6/24/2020 18:37
Bromochloromethane	< 5.00	ug/L	6/24/2020 18:37
Bromodichloromethane	< 2.00	ug/L	6/24/2020 18:37
Bromoform	< 5.00	ug/L	6/24/2020 18:37
Bromomethane	< 2.00	ug/L	6/24/2020 18:37
Carbon disulfide	< 2.00	ug/L	6/24/2020 18:37
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 18:37
Chlorobenzene	< 2.00	ug/L	6/24/2020 18:37
Chloroethane	< 2.00	ug/L	6/24/2020 18:37
Chloroform	< 2.00	ug/L	6/24/2020 18:37
Chloromethane	< 2.00	ug/L	6/24/2020 18:37
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 18:37

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-102

Lab Sample ID: 202600-04

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 18:37
Cyclohexane	< 10.0	ug/L	6/24/2020 18:37
Dibromochloromethane	< 2.00	ug/L	6/24/2020 18:37
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 18:37
Ethylbenzene	< 2.00	ug/L	6/24/2020 18:37
Freon 113	< 2.00	ug/L	6/24/2020 18:37
Isopropylbenzene	< 2.00	ug/L	6/24/2020 18:37
m,p-Xylene	< 2.00	ug/L	6/24/2020 18:37
Methyl acetate	< 2.00	ug/L	6/24/2020 18:37
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 18:37
Methylcyclohexane	< 2.00	ug/L	6/24/2020 18:37
Methylene chloride	< 5.00	ug/L	6/24/2020 18:37
o-Xylene	< 2.00	ug/L	6/24/2020 18:37
Styrene	< 5.00	ug/L	6/24/2020 18:37
Tetrachloroethene	< 2.00	ug/L	6/24/2020 18:37
Toluene	< 2.00	ug/L	6/24/2020 18:37
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 18:37
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 18:37
Trichloroethene	< 2.00	ug/L	6/24/2020 18:37
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 18:37
Vinyl chloride	< 2.00	ug/L	6/24/2020 18:37

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	132	80.8 - 132		6/24/2020 18:37
4-Bromofluorobenzene	58.0	56.6 - 130		6/24/2020 18:37
Pentafluorobenzene	97.5	87.4 - 113		6/24/2020 18:37
Toluene-D8	76.4	82.2 - 115	*	6/24/2020 18:37

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x71233.D

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MWR-102

Lab Sample ID: 202600-05

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	0.000117	mg/L	J	6/17/2020 06:34

Method Reference(s): EPA 7470A

Preparation Date: 6/15/2020

Data File: Hg200617A

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	0.0963	mg/L	J	6/24/2020 14:46
Antimony	< 0.0600	mg/L		6/24/2020 14:46
Arsenic	0.00775	mg/L	J	6/24/2020 14:46
Barium	0.0712	mg/L	J	6/24/2020 14:46
Beryllium	< 0.00500	mg/L		6/24/2020 14:46
Cadmium	< 0.00500	mg/L		6/24/2020 14:46
Calcium	86.8	mg/L		6/24/2020 14:46
Chromium	< 0.0100	mg/L		6/24/2020 14:46
Cobalt	< 0.0500	mg/L		6/24/2020 14:46
Copper	< 0.0200	mg/L		6/24/2020 14:46
Iron	1.41	mg/L		6/24/2020 14:46
Lead	< 0.0100	mg/L		6/24/2020 14:46
Magnesium	43.6	mg/L		6/24/2020 14:46
Manganese	0.102	mg/L		6/24/2020 14:46
Nickel	< 0.0400	mg/L		6/24/2020 14:46
Potassium	10.4	mg/L		6/24/2020 14:46
Selenium	< 0.0200	mg/L		6/24/2020 14:46
Silver	< 0.0100	mg/L		6/24/2020 14:46
Sodium	375	mg/L		6/24/2020 14:46
Thallium	< 0.0250	mg/L		6/24/2020 14:46
Vanadium	< 0.0250	mg/L		6/24/2020 14:46

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MWR-102

Lab Sample ID: 202600-05

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 14:46

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.94	ug/L		6/17/2020 22:19
1,2,4,5-Tetrachlorobenzene	< 9.94	ug/L		6/17/2020 22:19
1,2,4-Trichlorobenzene	< 9.94	ug/L		6/17/2020 22:19
1,2-Dichlorobenzene	< 9.94	ug/L		6/17/2020 22:19
1,3-Dichlorobenzene	< 9.94	ug/L		6/17/2020 22:19
1,4-Dichlorobenzene	< 9.94	ug/L		6/17/2020 22:19
2,2-Oxybis (1-chloropropane)	< 9.94	ug/L		6/17/2020 22:19
2,3,4,6-Tetrachlorophenol	< 9.94	ug/L		6/17/2020 22:19
2,4,5-Trichlorophenol	< 19.9	ug/L		6/17/2020 22:19
2,4,6-Trichlorophenol	< 9.94	ug/L		6/17/2020 22:19
2,4-Dichlorophenol	< 9.94	ug/L		6/17/2020 22:19
2,4-Dimethylphenol	< 19.9	ug/L		6/17/2020 22:19
2,4-Dinitrophenol	< 19.9	ug/L		6/17/2020 22:19
2,4-Dinitrotoluene	< 9.94	ug/L		6/17/2020 22:19
2,6-Dinitrotoluene	< 9.94	ug/L		6/17/2020 22:19
2-Chloronaphthalene	< 9.94	ug/L		6/17/2020 22:19
2-Chlorophenol	< 9.94	ug/L		6/17/2020 22:19
2-Methylnaphthalene	< 9.94	ug/L		6/17/2020 22:19
2-Methylphenol	< 9.94	ug/L		6/17/2020 22:19
2-Nitroaniline	< 19.9	ug/L		6/17/2020 22:19
2-Nitrophenol	< 9.94	ug/L		6/17/2020 22:19
3&4-Methylphenol	< 9.94	ug/L		6/17/2020 22:19
3,3'-Dichlorobenzidine	< 9.94	ug/L		6/17/2020 22:19
3-Nitroaniline	< 19.9	ug/L		6/17/2020 22:19

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Report Prepared Thursday, June 25, 2020

**Lab Project ID: 202600**
**Client:** **Bergmann Associates**
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

<b>Sample Identifier:</b>	MWR-102		
<b>Lab Sample ID:</b>	202600-05	<b>Date Sampled:</b>	6/11/2020
<b>Matrix:</b>	Groundwater	<b>Date Received:</b>	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.9	ug/L	6/17/2020 22:19
4-Bromophenyl phenyl ether	< 9.94	ug/L	6/17/2020 22:19
4-Chloro-3-methylphenol	< 9.94	ug/L	6/17/2020 22:19
4-Chloroaniline	< 9.94	ug/L	6/17/2020 22:19
4-Chlorophenyl phenyl ether	< 9.94	ug/L	6/17/2020 22:19
4-Nitroaniline	< 19.9	ug/L	6/17/2020 22:19
4-Nitrophenol	< 19.9	ug/L	6/17/2020 22:19
Acenaphthene	< 9.94	ug/L	6/17/2020 22:19
Acenaphthylene	< 9.94	ug/L	6/17/2020 22:19
Acetophenone	< 9.94	ug/L	6/17/2020 22:19
Anthracene	< 9.94	ug/L	6/17/2020 22:19
Atrazine	< 9.94	ug/L	6/17/2020 22:19
Benzaldehyde	< 9.94	ug/L	6/17/2020 22:19
Benzo (a) anthracene	< 9.94	ug/L	6/17/2020 22:19
Benzo (a) pyrene	< 9.94	ug/L	6/17/2020 22:19
Benzo (b) fluoranthene	< 9.94	ug/L	6/17/2020 22:19
Benzo (g,h,i) perylene	< 9.94	ug/L	6/17/2020 22:19
Benzo (k) fluoranthene	< 9.94	ug/L	6/17/2020 22:19
Bis (2-chloroethoxy) methane	< 9.94	ug/L	6/17/2020 22:19
Bis (2-chloroethyl) ether	< 9.94	ug/L	6/17/2020 22:19
Bis (2-ethylhexyl) phthalate	< 9.94	ug/L	6/17/2020 22:19
Butylbenzylphthalate	< 9.94	ug/L	6/17/2020 22:19
Caprolactam	< 9.94	ug/L	6/17/2020 22:19
Carbazole	< 9.94	ug/L	6/17/2020 22:19
Chrysene	< 9.94	ug/L	6/17/2020 22:19
Dibenz (a,h) anthracene	< 9.94	ug/L	6/17/2020 22:19
Dibenzofuran	< 9.94	ug/L	6/17/2020 22:19
Diethyl phthalate	< 9.94	ug/L	6/17/2020 22:19
Dimethyl phthalate	< 19.9	ug/L	6/17/2020 22:19
Di-n-butyl phthalate	< 9.94	ug/L	6/17/2020 22:19





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MWR-102		
Lab Sample ID:	202600-05	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

Di-n-octylphthalate	< 9.94	ug/L	6/17/2020 22:19
Fluoranthene	< 9.94	ug/L	6/17/2020 22:19
Fluorene	< 9.94	ug/L	6/17/2020 22:19
Hexachlorobenzene	< 9.94	ug/L	6/17/2020 22:19
Hexachlorobutadiene	< 9.94	ug/L	6/17/2020 22:19
Hexachlorocyclopentadiene	< 9.94	ug/L	6/17/2020 22:19
Hexachloroethane	< 9.94	ug/L	6/17/2020 22:19
Indeno (1,2,3-cd) pyrene	< 9.94	ug/L	6/17/2020 22:19
Isophorone	< 9.94	ug/L	6/17/2020 22:19
Naphthalene	< 9.94	ug/L	6/17/2020 22:19
Nitrobenzene	< 9.94	ug/L	6/17/2020 22:19
N-Nitroso-di-n-propylamine	< 9.94	ug/L	6/17/2020 22:19
N-Nitrosodiphenylamine	< 9.94	ug/L	6/17/2020 22:19
Pentachlorophenol	< 19.9	ug/L	6/17/2020 22:19
Phenanthrene	< 9.94	ug/L	6/17/2020 22:19
Phenol	< 9.94	ug/L	6/17/2020 22:19
Pyrene	< 9.94	ug/L	6/17/2020 22:19

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	75.5	61.4 - 115		6/17/2020 22:19
2-Fluorobiphenyl	65.4	38.4 - 101		6/17/2020 22:19
2-Fluorophenol	28.6	12.7 - 105		6/17/2020 22:19
Nitrobenzene-d5	75.5	57.3 - 100		6/17/2020 22:19
Phenol-d5	21.2	10 - 107		6/17/2020 22:19
Terphenyl-d14	73.0	58.1 - 117		6/17/2020 22:19

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 6/17/2020  
Data File: B47205.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 18:59

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Report Prepared Thursday, June 25, 2020



**Lab Project ID:** 202600

**Client:** **Bergmann Associates**

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

<b>Sample Identifier:</b>	MWR-102		
<b>Lab Sample ID:</b>	202600-05	<b>Date Sampled:</b>	6/11/2020
<b>Matrix:</b>	Groundwater	<b>Date Received:</b>	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 18:59
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 18:59
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 18:59
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 18:59
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 18:59
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 18:59
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 18:59
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 18:59
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:59
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 18:59
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 18:59
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:59
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 18:59
1,4-Dioxane	< 20.0	ug/L	6/24/2020 18:59
2-Butanone	< 10.0	ug/L	6/24/2020 18:59
2-Hexanone	< 5.00	ug/L	6/24/2020 18:59
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 18:59
Acetone	< 10.0	ug/L	6/24/2020 18:59
Benzene	< 1.00	ug/L	6/24/2020 18:59
Bromochloromethane	< 5.00	ug/L	6/24/2020 18:59
Bromodichloromethane	< 2.00	ug/L	6/24/2020 18:59
Bromoform	< 5.00	ug/L	6/24/2020 18:59
Bromomethane	< 2.00	ug/L	6/24/2020 18:59
Carbon disulfide	< 2.00	ug/L	6/24/2020 18:59
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 18:59
Chlorobenzene	< 2.00	ug/L	6/24/2020 18:59
Chloroethane	< 2.00	ug/L	6/24/2020 18:59
Chloroform	< 2.00	ug/L	6/24/2020 18:59
Chloromethane	< 2.00	ug/L	6/24/2020 18:59
cis-1,2-Dichloroethene	<b>1.27</b>	ug/L	J 6/24/2020 18:59

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MWR-102		
Lab Sample ID:	202600-05	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 18:59
Cyclohexane	< 10.0	ug/L	6/24/2020 18:59
Dibromochloromethane	< 2.00	ug/L	6/24/2020 18:59
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 18:59
Ethylbenzene	< 2.00	ug/L	6/24/2020 18:59
Freon 113	< 2.00	ug/L	6/24/2020 18:59
Isopropylbenzene	< 2.00	ug/L	6/24/2020 18:59
m,p-Xylene	< 2.00	ug/L	6/24/2020 18:59
Methyl acetate	< 2.00	ug/L	6/24/2020 18:59
Methyl tert-butyl Ether	<b>10.6</b>	ug/L	6/24/2020 18:59
Methylcyclohexane	< 2.00	ug/L	6/24/2020 18:59
Methylene chloride	< 5.00	ug/L	6/24/2020 18:59
o-Xylene	< 2.00	ug/L	6/24/2020 18:59
Styrene	< 5.00	ug/L	6/24/2020 18:59
Tetrachloroethene	< 2.00	ug/L	6/24/2020 18:59
Toluene	< 2.00	ug/L	6/24/2020 18:59
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 18:59
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 18:59
Trichloroethene	< 2.00	ug/L	6/24/2020 18:59
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 18:59
Vinyl chloride	< 2.00	ug/L	6/24/2020 18:59

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	<b>132</b>	80.8 - 132		6/24/2020 18:59
4-Bromofluorobenzene	<b>59.0</b>	56.6 - 130		6/24/2020 18:59
Pentafluorobenzene	<b>98.4</b>	87.4 - 113		6/24/2020 18:59
Toluene-D8	<b>75.2</b>	82.2 - 115	*	6/24/2020 18:59

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x71234.D

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-10

Lab Sample ID: 202600-06

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

Analyte	Result	Units	Qualifier	Date Analyzed
Mercury	< 0.000200	mg/L		6/17/2020 06:40
Method Reference(s):	EPA 7470A			
Preparation Date:	6/15/2020			
Data File:	Hg200617A			

**TAL Metals (ICP)**

Analyte	Result	Units	Qualifier	Date Analyzed
Aluminum	< 0.100	mg/L		6/24/2020 14:50
Antimony	< 0.0600	mg/L		6/24/2020 14:50
Arsenic	< 0.0100	mg/L		6/24/2020 14:50
Barium	<b>0.0680</b>	mg/L	J	6/24/2020 14:50
Beryllium	< 0.00500	mg/L		6/24/2020 14:50
Cadmium	< 0.00500	mg/L		6/24/2020 14:50
Calcium	<b>108</b>	mg/L		6/24/2020 14:50
Chromium	< 0.0100	mg/L		6/24/2020 14:50
Cobalt	< 0.0500	mg/L		6/24/2020 14:50
Copper	< 0.0200	mg/L		6/24/2020 14:50
Iron	<b>1.03</b>	mg/L		6/24/2020 14:50
Lead	< 0.0100	mg/L		6/24/2020 14:50
Magnesium	<b>63.5</b>	mg/L		6/24/2020 14:50
Manganese	<b>0.135</b>	mg/L		6/24/2020 14:50
Nickel	< 0.0400	mg/L		6/24/2020 14:50
Potassium	<b>11.1</b>	mg/L		6/24/2020 14:50
Selenium	< 0.0200	mg/L		6/24/2020 14:50
Silver	< 0.0100	mg/L		6/24/2020 14:50
Sodium	<b>313</b>	mg/L		6/24/2020 14:50
Thallium	< 0.0250	mg/L		6/24/2020 14:50
Vanadium	< 0.0250	mg/L		6/24/2020 14:50

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-10

Lab Sample ID: 202600-06

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 14:50

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.94	ug/L		6/17/2020 22:49
1,2,4,5-Tetrachlorobenzene	< 9.94	ug/L		6/17/2020 22:49
1,2,4-Trichlorobenzene	< 9.94	ug/L		6/17/2020 22:49
1,2-Dichlorobenzene	< 9.94	ug/L		6/17/2020 22:49
1,3-Dichlorobenzene	< 9.94	ug/L		6/17/2020 22:49
1,4-Dichlorobenzene	< 9.94	ug/L		6/17/2020 22:49
2,2-Oxybis (1-chloropropane)	< 9.94	ug/L		6/17/2020 22:49
2,3,4,6-Tetrachlorophenol	< 9.94	ug/L		6/17/2020 22:49
2,4,5-Trichlorophenol	< 19.9	ug/L		6/17/2020 22:49
2,4,6-Trichlorophenol	< 9.94	ug/L		6/17/2020 22:49
2,4-Dichlorophenol	< 9.94	ug/L		6/17/2020 22:49
2,4-Dimethylphenol	< 19.9	ug/L		6/17/2020 22:49
2,4-Dinitrophenol	< 19.9	ug/L		6/17/2020 22:49
2,4-Dinitrotoluene	< 9.94	ug/L		6/17/2020 22:49
2,6-Dinitrotoluene	< 9.94	ug/L		6/17/2020 22:49
2-Chloronaphthalene	< 9.94	ug/L		6/17/2020 22:49
2-Chlorophenol	< 9.94	ug/L		6/17/2020 22:49
2-Methylnaphthalene	< 9.94	ug/L		6/17/2020 22:49
2-Methylphenol	< 9.94	ug/L		6/17/2020 22:49
2-Nitroaniline	< 19.9	ug/L		6/17/2020 22:49
2-Nitrophenol	< 9.94	ug/L		6/17/2020 22:49
3&4-Methylphenol	< 9.94	ug/L		6/17/2020 22:49
3,3'-Dichlorobenzidine	< 9.94	ug/L		6/17/2020 22:49
3-Nitroaniline	< 19.9	ug/L		6/17/2020 22:49

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-10		
Lab Sample ID:	202600-06	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.9	ug/L	6/17/2020 22:49
4-Bromophenyl phenyl ether	< 9.94	ug/L	6/17/2020 22:49
4-Chloro-3-methylphenol	< 9.94	ug/L	6/17/2020 22:49
4-Chloroaniline	< 9.94	ug/L	6/17/2020 22:49
4-Chlorophenyl phenyl ether	< 9.94	ug/L	6/17/2020 22:49
4-Nitroaniline	< 19.9	ug/L	6/17/2020 22:49
4-Nitrophenol	< 19.9	ug/L	6/17/2020 22:49
Acenaphthene	< 9.94	ug/L	6/17/2020 22:49
Acenaphthylene	< 9.94	ug/L	6/17/2020 22:49
Acetophenone	< 9.94	ug/L	6/17/2020 22:49
Anthracene	< 9.94	ug/L	6/17/2020 22:49
Atrazine	< 9.94	ug/L	6/17/2020 22:49
Benzaldehyde	< 9.94	ug/L	6/17/2020 22:49
Benzo (a) anthracene	< 9.94	ug/L	6/17/2020 22:49
Benzo (a) pyrene	< 9.94	ug/L	6/17/2020 22:49
Benzo (b) fluoranthene	< 9.94	ug/L	6/17/2020 22:49
Benzo (g,h,i) perylene	< 9.94	ug/L	6/17/2020 22:49
Benzo (k) fluoranthene	< 9.94	ug/L	6/17/2020 22:49
Bis (2-chloroethoxy) methane	< 9.94	ug/L	6/17/2020 22:49
Bis (2-chloroethyl) ether	< 9.94	ug/L	6/17/2020 22:49
Bis (2-ethylhexyl) phthalate	< 9.94	ug/L	6/17/2020 22:49
Butylbenzylphthalate	< 9.94	ug/L	6/17/2020 22:49
Caprolactam	< 9.94	ug/L	6/17/2020 22:49
Carbazole	< 9.94	ug/L	6/17/2020 22:49
Chrysene	< 9.94	ug/L	6/17/2020 22:49
Dibenz (a,h) anthracene	< 9.94	ug/L	6/17/2020 22:49
Dibenzofuran	< 9.94	ug/L	6/17/2020 22:49
Diethyl phthalate	< 9.94	ug/L	6/17/2020 22:49
Dimethyl phthalate	< 19.9	ug/L	6/17/2020 22:49
Di-n-butyl phthalate	< 9.94	ug/L	6/17/2020 22:49

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Report Prepared Thursday, June 25, 2020





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-10		
Lab Sample ID:	202600-06	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

Di-n-octylphthalate	< 9.94	ug/L	6/17/2020 22:49
Fluoranthene	< 9.94	ug/L	6/17/2020 22:49
Fluorene	< 9.94	ug/L	6/17/2020 22:49
Hexachlorobenzene	< 9.94	ug/L	6/17/2020 22:49
Hexachlorobutadiene	< 9.94	ug/L	6/17/2020 22:49
Hexachlorocyclopentadiene	< 9.94	ug/L	6/17/2020 22:49
Hexachloroethane	< 9.94	ug/L	6/17/2020 22:49
Indeno (1,2,3-cd) pyrene	< 9.94	ug/L	6/17/2020 22:49
Isophorone	< 9.94	ug/L	6/17/2020 22:49
Naphthalene	< 9.94	ug/L	6/17/2020 22:49
Nitrobenzene	< 9.94	ug/L	6/17/2020 22:49
N-Nitroso-di-n-propylamine	< 9.94	ug/L	6/17/2020 22:49
N-Nitrosodiphenylamine	< 9.94	ug/L	6/17/2020 22:49
Pentachlorophenol	< 19.9	ug/L	6/17/2020 22:49
Phenanthrene	< 9.94	ug/L	6/17/2020 22:49
Phenol	< 9.94	ug/L	6/17/2020 22:49
Pyrene	< 9.94	ug/L	6/17/2020 22:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	74.5	61.4 - 115		6/17/2020 22:49
2-Fluorobiphenyl	62.3	38.4 - 101		6/17/2020 22:49
2-Fluorophenol	30.8	12.7 - 105		6/17/2020 22:49
Nitrobenzene-d5	72.0	57.3 - 100		6/17/2020 22:49
Phenol-d5	22.8	10 - 107		6/17/2020 22:49
Terphenyl-d14	75.0	58.1 - 117		6/17/2020 22:49

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 6/17/2020  
Data File: B47206.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 19:22

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-10		
Lab Sample ID:	202600-06	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 19:22
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 19:22
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 19:22
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 19:22
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 19:22
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 19:22
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 19:22
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 19:22
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 19:22
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 19:22
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 19:22
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 19:22
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 19:22
1,4-Dioxane	< 20.0	ug/L	6/24/2020 19:22
2-Butanone	< 10.0	ug/L	6/24/2020 19:22
2-Hexanone	< 5.00	ug/L	6/24/2020 19:22
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 19:22
Acetone	< 10.0	ug/L	6/24/2020 19:22
Benzene	< 1.00	ug/L	6/24/2020 19:22
Bromochloromethane	< 5.00	ug/L	6/24/2020 19:22
Bromodichloromethane	< 2.00	ug/L	6/24/2020 19:22
Bromoform	< 5.00	ug/L	6/24/2020 19:22
Bromomethane	< 2.00	ug/L	6/24/2020 19:22
Carbon disulfide	< 2.00	ug/L	6/24/2020 19:22
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 19:22
Chlorobenzene	< 2.00	ug/L	6/24/2020 19:22
Chloroethane	< 2.00	ug/L	6/24/2020 19:22
Chloroform	< 2.00	ug/L	6/24/2020 19:22
Chloromethane	< 2.00	ug/L	6/24/2020 19:22
cis-1,2-Dichloroethene	1.36	ug/L	J 6/24/2020 19:22

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-10		
Lab Sample ID:	202600-06	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 19:22
Cyclohexane	< 10.0	ug/L	6/24/2020 19:22
Dibromochloromethane	< 2.00	ug/L	6/24/2020 19:22
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 19:22
Ethylbenzene	< 2.00	ug/L	6/24/2020 19:22
Freon 113	< 2.00	ug/L	6/24/2020 19:22
Isopropylbenzene	< 2.00	ug/L	6/24/2020 19:22
m,p-Xylene	< 2.00	ug/L	6/24/2020 19:22
Methyl acetate	< 2.00	ug/L	6/24/2020 19:22
Methyl tert-butyl Ether	<b>11.1</b>	ug/L	6/24/2020 19:22
Methylcyclohexane	< 2.00	ug/L	6/24/2020 19:22
Methylene chloride	< 5.00	ug/L	6/24/2020 19:22
o-Xylene	< 2.00	ug/L	6/24/2020 19:22
Styrene	< 5.00	ug/L	6/24/2020 19:22
Tetrachloroethene	< 2.00	ug/L	6/24/2020 19:22
Toluene	< 2.00	ug/L	6/24/2020 19:22
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 19:22
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 19:22
Trichloroethene	< 2.00	ug/L	6/24/2020 19:22
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 19:22
Vinyl chloride	< 2.00	ug/L	6/24/2020 19:22

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	<b>137</b>	80.8 - 132	*	6/24/2020 19:22
4-Bromofluorobenzene	<b>58.1</b>	56.6 - 130		6/24/2020 19:22
Pentafluorobenzene	<b>101</b>	87.4 - 113		6/24/2020 19:22
Toluene-D8	<b>74.7</b>	82.2 - 115	*	6/24/2020 19:22

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x71235.D



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-107

Lab Sample ID: 202600-07

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	< 0.000200	mg/L		6/17/2020 06:42
Method Reference(s): EPA 7470A				
Preparation Date: 6/15/2020				
Data File: Hg200617A				

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	< 0.100	mg/L		6/24/2020 15:05
Antimony	< 0.0600	mg/L		6/24/2020 15:05
Arsenic	<b>0.00727</b>	mg/L	J	6/24/2020 15:05
Barium	<b>0.121</b>	mg/L		6/24/2020 15:05
Beryllium	< 0.00500	mg/L		6/24/2020 15:05
Cadmium	< 0.00500	mg/L		6/24/2020 15:05
Calcium	<b>279</b>	mg/L		6/24/2020 15:05
Chromium	< 0.0100	mg/L		6/24/2020 15:05
Cobalt	< 0.0500	mg/L		6/24/2020 15:05
Copper	< 0.0200	mg/L		6/24/2020 15:05
Iron	<b>3.80</b>	mg/L		6/24/2020 15:05
Lead	< 0.0100	mg/L		6/24/2020 15:05
Magnesium	<b>44.5</b>	mg/L		6/24/2020 15:05
Manganese	<b>0.394</b>	mg/L		6/24/2020 15:05
Nickel	< 0.0400	mg/L		6/24/2020 15:05
Potassium	<b>9.61</b>	mg/L		6/24/2020 15:05
Selenium	< 0.0200	mg/L		6/24/2020 15:05
Silver	< 0.0100	mg/L		6/24/2020 15:05
Sodium	<b>104</b>	mg/L		6/24/2020 15:05
Thallium	< 0.0250	mg/L		6/24/2020 15:05
Vanadium	< 0.0250	mg/L		6/24/2020 15:05

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-107

Lab Sample ID: 202600-07

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 15:05

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.68	ug/L		6/17/2020 23:18
1,2,4,5-Tetrachlorobenzene	< 9.68	ug/L		6/17/2020 23:18
1,2,4-Trichlorobenzene	< 9.68	ug/L		6/17/2020 23:18
1,2-Dichlorobenzene	< 9.68	ug/L		6/17/2020 23:18
1,3-Dichlorobenzene	< 9.68	ug/L		6/17/2020 23:18
1,4-Dichlorobenzene	< 9.68	ug/L		6/17/2020 23:18
2,2-Oxybis (1-chloropropane)	< 9.68	ug/L		6/17/2020 23:18
2,3,4,6-Tetrachlorophenol	< 9.68	ug/L		6/17/2020 23:18
2,4,5-Trichlorophenol	< 19.4	ug/L		6/17/2020 23:18
2,4,6-Trichlorophenol	< 9.68	ug/L		6/17/2020 23:18
2,4-Dichlorophenol	< 9.68	ug/L	M	6/17/2020 23:18
2,4-Dimethylphenol	< 19.4	ug/L		6/17/2020 23:18
2,4-Dinitrophenol	< 19.4	ug/L		6/17/2020 23:18
2,4-Dinitrotoluene	< 9.68	ug/L		6/17/2020 23:18
2,6-Dinitrotoluene	< 9.68	ug/L		6/17/2020 23:18
2-Chloronaphthalene	< 9.68	ug/L		6/17/2020 23:18
2-Chlorophenol	< 9.68	ug/L	M	6/17/2020 23:18
2-Methylnaphthalene	< 9.68	ug/L		6/17/2020 23:18
2-Methylphenol	< 9.68	ug/L		6/17/2020 23:18
2-Nitroaniline	< 19.4	ug/L		6/17/2020 23:18
2-Nitrophenol	< 9.68	ug/L		6/17/2020 23:18
3&4-Methylphenol	< 9.68	ug/L		6/17/2020 23:18
3,3'-Dichlorobenzidine	< 9.68	ug/L		6/17/2020 23:18
3-Nitroaniline	< 19.4	ug/L		6/17/2020 23:18

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-107		
Lab Sample ID:	202600-07	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.4	ug/L		6/17/2020 23:18
4-Bromophenyl phenyl ether	< 9.68	ug/L		6/17/2020 23:18
4-Chloro-3-methylphenol	< 9.68	ug/L	M	6/17/2020 23:18
4-Chloroaniline	< 9.68	ug/L		6/17/2020 23:18
4-Chlorophenyl phenyl ether	< 9.68	ug/L		6/17/2020 23:18
4-Nitroaniline	< 19.4	ug/L		6/17/2020 23:18
4-Nitrophenol	< 19.4	ug/L		6/17/2020 23:18
Acenaphthene	< 9.68	ug/L		6/17/2020 23:18
Acenaphthylene	< 9.68	ug/L		6/17/2020 23:18
Acetophenone	< 9.68	ug/L		6/17/2020 23:18
Anthracene	< 9.68	ug/L		6/17/2020 23:18
Atrazine	< 9.68	ug/L		6/17/2020 23:18
Benzaldehyde	< 9.68	ug/L		6/17/2020 23:18
Benzo (a) anthracene	< 9.68	ug/L		6/17/2020 23:18
Benzo (a) pyrene	< 9.68	ug/L		6/17/2020 23:18
Benzo (b) fluoranthene	< 9.68	ug/L		6/17/2020 23:18
Benzo (g,h,i) perylene	< 9.68	ug/L		6/17/2020 23:18
Benzo (k) fluoranthene	< 9.68	ug/L		6/17/2020 23:18
Bis (2-chloroethoxy) methane	< 9.68	ug/L		6/17/2020 23:18
Bis (2-chloroethyl) ether	< 9.68	ug/L		6/17/2020 23:18
Bis (2-ethylhexyl) phthalate	< 9.68	ug/L		6/17/2020 23:18
Butylbenzylphthalate	< 9.68	ug/L		6/17/2020 23:18
Caprolactam	< 9.68	ug/L		6/17/2020 23:18
Carbazole	< 9.68	ug/L		6/17/2020 23:18
Chrysene	< 9.68	ug/L		6/17/2020 23:18
Dibenz (a,h) anthracene	< 9.68	ug/L		6/17/2020 23:18
Dibenzofuran	< 9.68	ug/L		6/17/2020 23:18
Diethyl phthalate	< 9.68	ug/L		6/17/2020 23:18
Dimethyl phthalate	< 19.4	ug/L		6/17/2020 23:18
Di-n-butyl phthalate	< 9.68	ug/L		6/17/2020 23:18

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Report Prepared Thursday, June 25, 2020





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-107

Lab Sample ID: 202600-07

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Di-n-octylphthalate	< 9.68	ug/L	6/17/2020 23:18
Fluoranthene	< 9.68	ug/L	6/17/2020 23:18
Fluorene	< 9.68	ug/L	6/17/2020 23:18
Hexachlorobenzene	< 9.68	ug/L	6/17/2020 23:18
Hexachlorobutadiene	< 9.68	ug/L	6/17/2020 23:18
Hexachlorocyclopentadiene	< 9.68	ug/L	6/17/2020 23:18
Hexachloroethane	< 9.68	ug/L	6/17/2020 23:18
Indeno (1,2,3-cd) pyrene	< 9.68	ug/L	6/17/2020 23:18
Isophorone	< 9.68	ug/L	6/17/2020 23:18
Naphthalene	< 9.68	ug/L	6/17/2020 23:18
Nitrobenzene	< 9.68	ug/L	6/17/2020 23:18
N-Nitroso-di-n-propylamine	< 9.68	ug/L	6/17/2020 23:18
N-Nitrosodiphenylamine	< 9.68	ug/L	6/17/2020 23:18
Pentachlorophenol	< 19.4	ug/L	6/17/2020 23:18
Phenanthrene	< 9.68	ug/L	6/17/2020 23:18
Phenol	< 9.68	ug/L	6/17/2020 23:18
Pyrene	< 9.68	ug/L	6/17/2020 23:18

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	74.0	61.4 - 115		6/17/2020 23:18
2-Fluorobiphenyl	62.1	38.4 - 101		6/17/2020 23:18
2-Fluorophenol	28.7	12.7 - 105		6/17/2020 23:18
Nitrobenzene-d5	72.6	57.3 - 100		6/17/2020 23:18
Phenol-d5	20.7	10 - 107		6/17/2020 23:18
Terphenyl-d14	73.2	58.1 - 117		6/17/2020 23:18

Method Reference(s): EPA 8270D

EPA 3510C

Preparation Date: 6/17/2020

Data File: B47207.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 16:50

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-107		
Lab Sample ID:	202600-07	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 16:50
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 16:50
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 16:50
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 16:50
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 16:50
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 16:50
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 16:50
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 16:50
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 16:50
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 16:50
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 16:50
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 16:50
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 16:50
1,4-Dioxane	< 20.0	ug/L	6/24/2020 16:50
2-Butanone	< 10.0	ug/L	6/24/2020 16:50
2-Hexanone	< 5.00	ug/L	6/24/2020 16:50
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 16:50
Acetone	< 10.0	ug/L	6/24/2020 16:50
Benzene	< 1.00	ug/L	6/24/2020 16:50
Bromochloromethane	< 5.00	ug/L	6/24/2020 16:50
Bromodichloromethane	< 2.00	ug/L	6/24/2020 16:50
Bromoform	< 5.00	ug/L	6/24/2020 16:50
Bromomethane	< 2.00	ug/L	6/24/2020 16:50
Carbon disulfide	< 2.00	ug/L	6/24/2020 16:50
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 16:50
Chlorobenzene	< 2.00	ug/L	6/24/2020 16:50
Chloroethane	< 2.00	ug/L	M 6/24/2020 16:50
Chloroform	< 2.00	ug/L	6/24/2020 16:50
Chloromethane	< 2.00	ug/L	6/24/2020 16:50
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 16:50

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-107		
Lab Sample ID:	202600-07	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 16:50
Cyclohexane	< 10.0	ug/L	6/24/2020 16:50
Dibromochloromethane	< 2.00	ug/L	6/24/2020 16:50
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 16:50
Ethylbenzene	< 2.00	ug/L	6/24/2020 16:50
Freon 113	< 2.00	ug/L	6/24/2020 16:50
Isopropylbenzene	< 2.00	ug/L	6/24/2020 16:50
m,p-Xylene	< 2.00	ug/L	6/24/2020 16:50
Methyl acetate	< 2.00	ug/L	6/24/2020 16:50
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 16:50
Methylcyclohexane	< 2.00	ug/L	6/24/2020 16:50
Methylene chloride	< 5.00	ug/L	6/24/2020 16:50
o-Xylene	< 2.00	ug/L	6/24/2020 16:50
Styrene	< 5.00	ug/L	6/24/2020 16:50
Tetrachloroethene	< 2.00	ug/L	6/24/2020 16:50
Toluene	< 2.00	ug/L	6/24/2020 16:50
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 16:50
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 16:50
Trichloroethene	< 2.00	ug/L	6/24/2020 16:50
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 16:50
Vinyl chloride	< 2.00	ug/L	6/24/2020 16:50

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	134	80.8 - 132	*	6/24/2020 16:50
4-Bromofluorobenzene	58.2	56.6 - 130		6/24/2020 16:50
Pentafluorobenzene	98.0	87.4 - 113		6/24/2020 16:50
Toluene-D8	75.2	82.2 - 115	*	6/24/2020 16:50

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x71229a.D



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-105

Lab Sample ID: 202600-08

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	< 0.000200	mg/L		6/17/2020 06:47
Method Reference(s): EPA 7470A				
Preparation Date: 6/15/2020				
Data File: Hg200617A				

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	< 0.100	mg/L		6/24/2020 15:27
Antimony	< 0.0600	mg/L		6/24/2020 15:27
Arsenic	< 0.0100	mg/L		6/24/2020 15:27
Barium	< 0.100	mg/L		6/24/2020 15:27
Beryllium	< 0.00500	mg/L		6/24/2020 15:27
Cadmium	< 0.00500	mg/L		6/24/2020 15:27
Calcium	<b>115</b>	mg/L		6/24/2020 15:27
Chromium	< 0.0100	mg/L		6/24/2020 15:27
Cobalt	< 0.0500	mg/L		6/24/2020 15:27
Copper	< 0.0200	mg/L		6/24/2020 15:27
Iron	< 0.100	mg/L		6/24/2020 15:27
Lead	< 0.0100	mg/L		6/24/2020 15:27
Magnesium	<b>107</b>	mg/L		6/24/2020 15:27
Manganese	<b>0.0442</b>	mg/L		6/24/2020 15:27
Nickel	< 0.0400	mg/L		6/24/2020 15:27
Potassium	<b>9.64</b>	mg/L		6/24/2020 15:27
Selenium	< 0.0200	mg/L		6/24/2020 15:27
Silver	< 0.0100	mg/L		6/24/2020 15:27
Sodium	<b>93.6</b>	mg/L		6/24/2020 15:27
Thallium	< 0.0250	mg/L		6/24/2020 15:27
Vanadium	< 0.0250	mg/L		6/24/2020 15:27

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-105

Lab Sample ID: 202600-08

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc < 0.0600 mg/L 6/24/2020 15:27

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 9.68	ug/L		6/18/2020 00:47
1,2,4,5-Tetrachlorobenzene	< 9.68	ug/L		6/18/2020 00:47
1,2,4-Trichlorobenzene	< 9.68	ug/L		6/18/2020 00:47
1,2-Dichlorobenzene	< 9.68	ug/L		6/18/2020 00:47
1,3-Dichlorobenzene	< 9.68	ug/L		6/18/2020 00:47
1,4-Dichlorobenzene	< 9.68	ug/L		6/18/2020 00:47
2,2-Oxybis (1-chloropropane)	< 9.68	ug/L		6/18/2020 00:47
2,3,4,6-Tetrachlorophenol	< 9.68	ug/L		6/18/2020 00:47
2,4,5-Trichlorophenol	< 19.4	ug/L		6/18/2020 00:47
2,4,6-Trichlorophenol	< 9.68	ug/L		6/18/2020 00:47
2,4-Dichlorophenol	< 9.68	ug/L		6/18/2020 00:47
2,4-Dimethylphenol	< 19.4	ug/L		6/18/2020 00:47
2,4-Dinitrophenol	< 19.4	ug/L		6/18/2020 00:47
2,4-Dinitrotoluene	< 9.68	ug/L		6/18/2020 00:47
2,6-Dinitrotoluene	< 9.68	ug/L		6/18/2020 00:47
2-Chloronaphthalene	< 9.68	ug/L		6/18/2020 00:47
2-Chlorophenol	< 9.68	ug/L		6/18/2020 00:47
2-Methylnaphthalene	< 9.68	ug/L		6/18/2020 00:47
2-Methylphenol	< 9.68	ug/L		6/18/2020 00:47
2-Nitroaniline	< 19.4	ug/L		6/18/2020 00:47
2-Nitrophenol	< 9.68	ug/L		6/18/2020 00:47
3&4-Methylphenol	< 9.68	ug/L		6/18/2020 00:47
3,3'-Dichlorobenzidine	< 9.68	ug/L		6/18/2020 00:47
3-Nitroaniline	< 19.4	ug/L		6/18/2020 00:47

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-105		
Lab Sample ID:	202600-08	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

4,6-Dinitro-2-methylphenol	< 19.4	ug/L	6/18/2020 00:47
4-Bromophenyl phenyl ether	< 9.68	ug/L	6/18/2020 00:47
4-Chloro-3-methylphenol	< 9.68	ug/L	6/18/2020 00:47
4-Chloroaniline	< 9.68	ug/L	6/18/2020 00:47
4-Chlorophenyl phenyl ether	< 9.68	ug/L	6/18/2020 00:47
4-Nitroaniline	< 19.4	ug/L	6/18/2020 00:47
4-Nitrophenol	< 19.4	ug/L	6/18/2020 00:47
Acenaphthene	< 9.68	ug/L	6/18/2020 00:47
Acenaphthylene	< 9.68	ug/L	6/18/2020 00:47
Acetophenone	< 9.68	ug/L	6/18/2020 00:47
Anthracene	< 9.68	ug/L	6/18/2020 00:47
Atrazine	< 9.68	ug/L	6/18/2020 00:47
Benzaldehyde	< 9.68	ug/L	6/18/2020 00:47
Benzo (a) anthracene	< 9.68	ug/L	6/18/2020 00:47
Benzo (a) pyrene	< 9.68	ug/L	6/18/2020 00:47
Benzo (b) fluoranthene	< 9.68	ug/L	6/18/2020 00:47
Benzo (g,h,i) perylene	< 9.68	ug/L	6/18/2020 00:47
Benzo (k) fluoranthene	< 9.68	ug/L	6/18/2020 00:47
Bis (2-chloroethoxy) methane	< 9.68	ug/L	6/18/2020 00:47
Bis (2-chloroethyl) ether	< 9.68	ug/L	6/18/2020 00:47
Bis (2-ethylhexyl) phthalate	< 9.68	ug/L	6/18/2020 00:47
Butylbenzylphthalate	< 9.68	ug/L	6/18/2020 00:47
Caprolactam	< 9.68	ug/L	6/18/2020 00:47
Carbazole	< 9.68	ug/L	6/18/2020 00:47
Chrysene	< 9.68	ug/L	6/18/2020 00:47
Dibenz (a,h) anthracene	< 9.68	ug/L	6/18/2020 00:47
Dibenzofuran	< 9.68	ug/L	6/18/2020 00:47
Diethyl phthalate	< 9.68	ug/L	6/18/2020 00:47
Dimethyl phthalate	< 19.4	ug/L	6/18/2020 00:47
Di-n-butyl phthalate	< 9.68	ug/L	6/18/2020 00:47

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Report Prepared Thursday, June 25, 2020





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-105

Lab Sample ID: 202600-08

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Di-n-octylphthalate	< 9.68	ug/L	6/18/2020 00:47
Fluoranthene	< 9.68	ug/L	6/18/2020 00:47
Fluorene	< 9.68	ug/L	6/18/2020 00:47
Hexachlorobenzene	< 9.68	ug/L	6/18/2020 00:47
Hexachlorobutadiene	< 9.68	ug/L	6/18/2020 00:47
Hexachlorocyclopentadiene	< 9.68	ug/L	6/18/2020 00:47
Hexachloroethane	< 9.68	ug/L	6/18/2020 00:47
Indeno (1,2,3-cd) pyrene	< 9.68	ug/L	6/18/2020 00:47
Isophorone	< 9.68	ug/L	6/18/2020 00:47
Naphthalene	< 9.68	ug/L	6/18/2020 00:47
Nitrobenzene	< 9.68	ug/L	6/18/2020 00:47
N-Nitroso-di-n-propylamine	< 9.68	ug/L	6/18/2020 00:47
N-Nitrosodiphenylamine	< 9.68	ug/L	6/18/2020 00:47
Pentachlorophenol	< 19.4	ug/L	6/18/2020 00:47
Phenanthrene	< 9.68	ug/L	6/18/2020 00:47
Phenol	< 9.68	ug/L	6/18/2020 00:47
Pyrene	< 9.68	ug/L	6/18/2020 00:47

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	69.1	61.4 - 115		6/18/2020 00:47
2-Fluorobiphenyl	58.6	38.4 - 101		6/18/2020 00:47
2-Fluorophenol	27.6	12.7 - 105		6/18/2020 00:47
Nitrobenzene-d5	68.7	57.3 - 100		6/18/2020 00:47
Phenol-d5	20.2	10 - 107		6/18/2020 00:47
Terphenyl-d14	71.6	58.1 - 117		6/18/2020 00:47

Method Reference(s): EPA 8270D

EPA 3510C

Preparation Date: 6/17/2020

Data File: B47210.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 19:44

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Report Prepared Thursday, June 25, 2020

**Lab Project ID:** 202600

**Client:** **Bergmann Associates**

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

<b>Sample Identifier:</b>	MW-105		
<b>Lab Sample ID:</b>	202600-08	<b>Date Sampled:</b>	6/11/2020
<b>Matrix:</b>	Groundwater	<b>Date Received:</b>	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 19:44
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 19:44
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 19:44
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 19:44
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 19:44
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 19:44
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 19:44
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 19:44
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 19:44
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 19:44
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 19:44
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 19:44
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 19:44
1,4-Dioxane	< 20.0	ug/L	6/24/2020 19:44
2-Butanone	< 10.0	ug/L	6/24/2020 19:44
2-Hexanone	< 5.00	ug/L	6/24/2020 19:44
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 19:44
Acetone	< 10.0	ug/L	6/24/2020 19:44
Benzene	< 1.00	ug/L	6/24/2020 19:44
Bromochloromethane	< 5.00	ug/L	6/24/2020 19:44
Bromodichloromethane	< 2.00	ug/L	6/24/2020 19:44
Bromoform	< 5.00	ug/L	6/24/2020 19:44
Bromomethane	< 2.00	ug/L	6/24/2020 19:44
Carbon disulfide	< 2.00	ug/L	6/24/2020 19:44
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 19:44
Chlorobenzene	< 2.00	ug/L	6/24/2020 19:44
Chloroethane	< 2.00	ug/L	6/24/2020 19:44
Chloroform	< 2.00	ug/L	6/24/2020 19:44
Chloromethane	< 2.00	ug/L	6/24/2020 19:44
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 19:44

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Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-105

Lab Sample ID: 202600-08

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 19:44
Cyclohexane	< 10.0	ug/L	6/24/2020 19:44
Dibromochloromethane	< 2.00	ug/L	6/24/2020 19:44
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 19:44
Ethylbenzene	< 2.00	ug/L	6/24/2020 19:44
Freon 113	< 2.00	ug/L	6/24/2020 19:44
Isopropylbenzene	< 2.00	ug/L	6/24/2020 19:44
m,p-Xylene	< 2.00	ug/L	6/24/2020 19:44
Methyl acetate	< 2.00	ug/L	6/24/2020 19:44
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 19:44
Methylcyclohexane	< 2.00	ug/L	6/24/2020 19:44
Methylene chloride	< 5.00	ug/L	6/24/2020 19:44
o-Xylene	< 2.00	ug/L	6/24/2020 19:44
Styrene	< 5.00	ug/L	6/24/2020 19:44
Tetrachloroethene	< 2.00	ug/L	6/24/2020 19:44
Toluene	< 2.00	ug/L	6/24/2020 19:44
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 19:44
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 19:44
Trichloroethene	< 2.00	ug/L	6/24/2020 19:44
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 19:44
Vinyl chloride	< 2.00	ug/L	6/24/2020 19:44

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	137	80.8 - 132	*	6/24/2020 19:44
4-Bromofluorobenzene	57.8	56.6 - 130		6/24/2020 19:44
Pentafluorobenzene	101	87.4 - 113		6/24/2020 19:44
Toluene-D8	73.7	82.2 - 115	*	6/24/2020 19:44

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x71236.D

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-106

Lab Sample ID: 202600-09

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

**Mercury**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Mercury	0.000247	mg/L		6/17/2020 06:49
Method Reference(s): EPA 7470A				
Preparation Date: 6/15/2020				
Data File: Hg200617A				

**TAL Metals (ICP)**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Aluminum	2.59	mg/L		6/24/2020 15:32
Antimony	< 0.0600	mg/L		6/24/2020 15:32
Arsenic	0.00844	mg/L	J	6/24/2020 15:32
Barium	0.192	mg/L		6/24/2020 15:32
Beryllium	< 0.00500	mg/L		6/24/2020 15:32
Cadmium	< 0.00500	mg/L		6/24/2020 15:32
Calcium	153	mg/L		6/24/2020 15:32
Chromium	< 0.0100	mg/L		6/24/2020 15:32
Cobalt	< 0.0500	mg/L		6/24/2020 15:32
Copper	< 0.0200	mg/L		6/24/2020 15:32
Iron	6.53	mg/L		6/24/2020 15:32
Lead	0.0385	mg/L		6/24/2020 15:32
Magnesium	29.2	mg/L		6/24/2020 15:32
Manganese	0.472	mg/L		6/24/2020 15:32
Nickel	< 0.0400	mg/L		6/24/2020 15:32
Potassium	10.4	mg/L		6/24/2020 15:32
Selenium	< 0.0200	mg/L		6/24/2020 15:32
Silver	< 0.0100	mg/L		6/24/2020 15:32
Sodium	181	mg/L		6/24/2020 15:32
Thallium	< 0.0250	mg/L		6/24/2020 15:32
Vanadium	< 0.0250	mg/L		6/24/2020 15:32

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-106

Lab Sample ID: 202600-09

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Zinc 0.0748 mg/L 6/24/2020 15:32

Method Reference(s): EPA 6010C

EPA 3005A

Preparation Date: 6/12/2020

Data File: 200624B

**Semi-Volatile Organics (Acid/Base Neutrals)**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1-Biphenyl	< 10.4	ug/L		6/18/2020 01:17
1,2,4,5-Tetrachlorobenzene	< 10.4	ug/L		6/18/2020 01:17
1,2,4-Trichlorobenzene	< 10.4	ug/L		6/18/2020 01:17
1,2-Dichlorobenzene	< 10.4	ug/L		6/18/2020 01:17
1,3-Dichlorobenzene	< 10.4	ug/L		6/18/2020 01:17
1,4-Dichlorobenzene	< 10.4	ug/L		6/18/2020 01:17
2,2-Oxybis (1-chloropropane)	< 10.4	ug/L		6/18/2020 01:17
2,3,4,6-Tetrachlorophenol	< 10.4	ug/L		6/18/2020 01:17
2,4,5-Trichlorophenol	< 20.8	ug/L		6/18/2020 01:17
2,4,6-Trichlorophenol	< 10.4	ug/L		6/18/2020 01:17
2,4-Dichlorophenol	< 10.4	ug/L		6/18/2020 01:17
2,4-Dimethylphenol	< 20.8	ug/L		6/18/2020 01:17
2,4-Dinitrophenol	< 20.8	ug/L		6/18/2020 01:17
2,4-Dinitrotoluene	< 10.4	ug/L		6/18/2020 01:17
2,6-Dinitrotoluene	< 10.4	ug/L		6/18/2020 01:17
2-Chloronaphthalene	< 10.4	ug/L		6/18/2020 01:17
2-Chlorophenol	< 10.4	ug/L		6/18/2020 01:17
2-Methylnaphthalene	< 10.4	ug/L		6/18/2020 01:17
2-Methylphenol	< 10.4	ug/L		6/18/2020 01:17
2-Nitroaniline	< 20.8	ug/L		6/18/2020 01:17
2-Nitrophenol	< 10.4	ug/L		6/18/2020 01:17
3&4-Methylphenol	< 10.4	ug/L		6/18/2020 01:17
3,3'-Dichlorobenzidine	< 10.4	ug/L		6/18/2020 01:17
3-Nitroaniline	< 20.8	ug/L		6/18/2020 01:17

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Report Prepared Thursday, June 25, 2020

**Lab Project ID: 202600**
**Client:** **Bergmann Associates**
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

<b>Sample Identifier:</b>	MW-106		
<b>Lab Sample ID:</b>	202600-09	<b>Date Sampled:</b>	6/11/2020
<b>Matrix:</b>	Groundwater	<b>Date Received:</b>	6/11/2020

4,6-Dinitro-2-methylphenol	< 20.8	ug/L	6/18/2020 01:17
4-Bromophenyl phenyl ether	< 10.4	ug/L	6/18/2020 01:17
4-Chloro-3-methylphenol	< 10.4	ug/L	6/18/2020 01:17
4-Chloroaniline	< 10.4	ug/L	6/18/2020 01:17
4-Chlorophenyl phenyl ether	< 10.4	ug/L	6/18/2020 01:17
4-Nitroaniline	< 20.8	ug/L	6/18/2020 01:17
4-Nitrophenol	< 20.8	ug/L	6/18/2020 01:17
Acenaphthene	< 10.4	ug/L	6/18/2020 01:17
Acenaphthylene	< 10.4	ug/L	6/18/2020 01:17
Acetophenone	< 10.4	ug/L	6/18/2020 01:17
Anthracene	< 10.4	ug/L	6/18/2020 01:17
Atrazine	< 10.4	ug/L	6/18/2020 01:17
Benzaldehyde	< 10.4	ug/L	6/18/2020 01:17
Benzo (a) anthracene	< 10.4	ug/L	6/18/2020 01:17
Benzo (a) pyrene	< 10.4	ug/L	6/18/2020 01:17
Benzo (b) fluoranthene	< 10.4	ug/L	6/18/2020 01:17
Benzo (g,h,i) perylene	< 10.4	ug/L	6/18/2020 01:17
Benzo (k) fluoranthene	< 10.4	ug/L	6/18/2020 01:17
Bis (2-chloroethoxy) methane	< 10.4	ug/L	6/18/2020 01:17
Bis (2-chloroethyl) ether	< 10.4	ug/L	6/18/2020 01:17
Bis (2-ethylhexyl) phthalate	< 10.4	ug/L	6/18/2020 01:17
Butylbenzylphthalate	< 10.4	ug/L	6/18/2020 01:17
Caprolactam	< 10.4	ug/L	6/18/2020 01:17
Carbazole	< 10.4	ug/L	6/18/2020 01:17
Chrysene	< 10.4	ug/L	6/18/2020 01:17
Dibenz (a,h) anthracene	< 10.4	ug/L	6/18/2020 01:17
Dibenzofuran	< 10.4	ug/L	6/18/2020 01:17
Diethyl phthalate	< 10.4	ug/L	6/18/2020 01:17
Dimethyl phthalate	< 20.8	ug/L	6/18/2020 01:17
Di-n-butyl phthalate	< 10.4	ug/L	6/18/2020 01:17





Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-106

Lab Sample ID: 202600-09

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

Di-n-octylphthalate	< 10.4	ug/L	6/18/2020 01:17
Fluoranthene	< 10.4	ug/L	6/18/2020 01:17
Fluorene	< 10.4	ug/L	6/18/2020 01:17
Hexachlorobenzene	< 10.4	ug/L	6/18/2020 01:17
Hexachlorobutadiene	< 10.4	ug/L	6/18/2020 01:17
Hexachlorocyclopentadiene	< 10.4	ug/L	6/18/2020 01:17
Hexachloroethane	< 10.4	ug/L	6/18/2020 01:17
Indeno (1,2,3-cd) pyrene	< 10.4	ug/L	6/18/2020 01:17
Isophorone	< 10.4	ug/L	6/18/2020 01:17
Naphthalene	< 10.4	ug/L	6/18/2020 01:17
Nitrobenzene	< 10.4	ug/L	6/18/2020 01:17
N-Nitroso-di-n-propylamine	< 10.4	ug/L	6/18/2020 01:17
N-Nitrosodiphenylamine	< 10.4	ug/L	6/18/2020 01:17
Pentachlorophenol	< 20.8	ug/L	6/18/2020 01:17
Phenanthrene	< 10.4	ug/L	6/18/2020 01:17
Phenol	< 10.4	ug/L	6/18/2020 01:17
Pyrene	< 10.4	ug/L	6/18/2020 01:17

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2,4,6-Tribromophenol	71.2	61.4 - 115		6/18/2020 01:17
2-Fluorobiphenyl	61.8	38.4 - 101		6/18/2020 01:17
2-Fluorophenol	26.0	12.7 - 105		6/18/2020 01:17
Nitrobenzene-d5	71.4	57.3 - 100		6/18/2020 01:17
Phenol-d5	19.1	10 - 107		6/18/2020 01:17
Terphenyl-d14	69.8	58.1 - 117		6/18/2020 01:17

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 6/17/2020  
Data File: B47211.D

### **Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 20:07

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier:	MW-106		
Lab Sample ID:	202600-09	Date Sampled:	6/11/2020
Matrix:	Groundwater	Date Received:	6/11/2020

1,1,2,2-Tetrachloroethane	< 2.00	ug/L	6/24/2020 20:07
1,1,2-Trichloroethane	< 2.00	ug/L	6/24/2020 20:07
1,1-Dichloroethane	< 2.00	ug/L	6/24/2020 20:07
1,1-Dichloroethene	< 2.00	ug/L	6/24/2020 20:07
1,2,3-Trichlorobenzene	< 5.00	ug/L	6/24/2020 20:07
1,2,4-Trichlorobenzene	< 5.00	ug/L	6/24/2020 20:07
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L	6/24/2020 20:07
1,2-Dibromoethane	< 2.00	ug/L	6/24/2020 20:07
1,2-Dichlorobenzene	< 2.00	ug/L	6/24/2020 20:07
1,2-Dichloroethane	< 2.00	ug/L	6/24/2020 20:07
1,2-Dichloropropane	< 2.00	ug/L	6/24/2020 20:07
1,3-Dichlorobenzene	< 2.00	ug/L	6/24/2020 20:07
1,4-Dichlorobenzene	< 2.00	ug/L	6/24/2020 20:07
1,4-Dioxane	< 20.0	ug/L	6/24/2020 20:07
2-Butanone	< 10.0	ug/L	6/24/2020 20:07
2-Hexanone	< 5.00	ug/L	6/24/2020 20:07
4-Methyl-2-pentanone	< 5.00	ug/L	6/24/2020 20:07
Acetone	< 10.0	ug/L	6/24/2020 20:07
Benzene	< 1.00	ug/L	6/24/2020 20:07
Bromochloromethane	< 5.00	ug/L	6/24/2020 20:07
Bromodichloromethane	< 2.00	ug/L	6/24/2020 20:07
Bromoform	< 5.00	ug/L	6/24/2020 20:07
Bromomethane	< 2.00	ug/L	6/24/2020 20:07
Carbon disulfide	< 2.00	ug/L	6/24/2020 20:07
Carbon Tetrachloride	< 2.00	ug/L	6/24/2020 20:07
Chlorobenzene	<b>4.93</b>	ug/L	6/24/2020 20:07
Chloroethane	< 2.00	ug/L	6/24/2020 20:07
Chloroform	< 2.00	ug/L	6/24/2020 20:07
Chloromethane	< 2.00	ug/L	6/24/2020 20:07
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 20:07

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: MW-106

Lab Sample ID: 202600-09

Date Sampled: 6/11/2020

Matrix: Groundwater

Date Received: 6/11/2020

cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 20:07
Cyclohexane	< 10.0	ug/L	6/24/2020 20:07
Dibromochloromethane	< 2.00	ug/L	6/24/2020 20:07
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 20:07
Ethylbenzene	< 2.00	ug/L	6/24/2020 20:07
Freon 113	< 2.00	ug/L	6/24/2020 20:07
Isopropylbenzene	< 2.00	ug/L	6/24/2020 20:07
m,p-Xylene	< 2.00	ug/L	6/24/2020 20:07
Methyl acetate	< 2.00	ug/L	6/24/2020 20:07
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 20:07
Methylcyclohexane	< 2.00	ug/L	6/24/2020 20:07
Methylene chloride	< 5.00	ug/L	6/24/2020 20:07
o-Xylene	< 2.00	ug/L	6/24/2020 20:07
Styrene	< 5.00	ug/L	6/24/2020 20:07
Tetrachloroethene	< 2.00	ug/L	6/24/2020 20:07
Toluene	< 2.00	ug/L	6/24/2020 20:07
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 20:07
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 20:07
Trichloroethene	< 2.00	ug/L	6/24/2020 20:07
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 20:07
Vinyl chloride	< 2.00	ug/L	6/24/2020 20:07

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	136	80.8 - 132	*	6/24/2020 20:07
4-Bromofluorobenzene	58.2	56.6 - 130		6/24/2020 20:07
Pentafluorobenzene	102	87.4 - 113		6/24/2020 20:07
Toluene-D8	75.2	82.2 - 115	*	6/24/2020 20:07

Method Reference(s): EPA 8260C

EPA 5030C

Data File: x71237.D

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Report Prepared Thursday, June 25, 2020

**Lab Project ID:** 202600

**Client:** Bergmann Associates
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Sample Identifier:** Trip Blank T989

**Lab Sample ID:** 202600-10

**Date Sampled:** 6/11/2020

**Matrix:** Water

**Date Received:** 6/11/2020

### **Volatile Organics**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,1,1-Trichloroethane	< 2.00	ug/L		6/24/2020 15:23
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/24/2020 15:23
1,1,2-Trichloroethane	< 2.00	ug/L		6/24/2020 15:23
1,1-Dichloroethane	< 2.00	ug/L		6/24/2020 15:23
1,1-Dichloroethene	< 2.00	ug/L		6/24/2020 15:23
1,2,3-Trichlorobenzene	< 5.00	ug/L		6/24/2020 15:23
1,2,4-Trichlorobenzene	< 5.00	ug/L		6/24/2020 15:23
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		6/24/2020 15:23
1,2-Dibromoethane	< 2.00	ug/L		6/24/2020 15:23
1,2-Dichlorobenzene	< 2.00	ug/L		6/24/2020 15:23
1,2-Dichloroethane	< 2.00	ug/L		6/24/2020 15:23
1,2-Dichloropropane	< 2.00	ug/L		6/24/2020 15:23
1,3-Dichlorobenzene	< 2.00	ug/L		6/24/2020 15:23
1,4-Dichlorobenzene	< 2.00	ug/L		6/24/2020 15:23
1,4-Dioxane	< 20.0	ug/L		6/24/2020 15:23
2-Butanone	< 10.0	ug/L		6/24/2020 15:23
2-Hexanone	< 5.00	ug/L		6/24/2020 15:23
4-Methyl-2-pentanone	< 5.00	ug/L		6/24/2020 15:23
Acetone	< 10.0	ug/L		6/24/2020 15:23
Benzene	< 1.00	ug/L		6/24/2020 15:23
Bromochloromethane	< 5.00	ug/L		6/24/2020 15:23
Bromodichloromethane	< 2.00	ug/L		6/24/2020 15:23
Bromoform	< 5.00	ug/L		6/24/2020 15:23
Bromomethane	< 2.00	ug/L		6/24/2020 15:23
Carbon disulfide	< 2.00	ug/L		6/24/2020 15:23
Carbon Tetrachloride	< 2.00	ug/L		6/24/2020 15:23
Chlorobenzene	< 2.00	ug/L		6/24/2020 15:23
Chloroethane	< 2.00	ug/L		6/24/2020 15:23

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Report Prepared Thursday, June 25, 2020



Lab Project ID: 202600

Client: **Bergmann Associates**

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Sample Identifier: Trip Blank T989

Lab Sample ID: 202600-10

Date Sampled: 6/11/2020

Matrix: Water

Date Received: 6/11/2020

Chloroform	< 2.00	ug/L	6/24/2020 15:23
Chloromethane	< 2.00	ug/L	6/24/2020 15:23
cis-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 15:23
cis-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 15:23
Cyclohexane	< 10.0	ug/L	6/24/2020 15:23
Dibromochloromethane	< 2.00	ug/L	6/24/2020 15:23
Dichlorodifluoromethane	< 2.00	ug/L	6/24/2020 15:23
Ethylbenzene	< 2.00	ug/L	6/24/2020 15:23
Freon 113	< 2.00	ug/L	6/24/2020 15:23
Isopropylbenzene	< 2.00	ug/L	6/24/2020 15:23
m,p-Xylene	< 2.00	ug/L	6/24/2020 15:23
Methyl acetate	< 2.00	ug/L	6/24/2020 15:23
Methyl tert-butyl Ether	< 2.00	ug/L	6/24/2020 15:23
Methylcyclohexane	< 2.00	ug/L	6/24/2020 15:23
Methylene chloride	< 5.00	ug/L	6/24/2020 15:23
o-Xylene	< 2.00	ug/L	6/24/2020 15:23
Styrene	< 5.00	ug/L	6/24/2020 15:23
Tetrachloroethene	< 2.00	ug/L	6/24/2020 15:23
Toluene	< 2.00	ug/L	6/24/2020 15:23
trans-1,2-Dichloroethene	< 2.00	ug/L	6/24/2020 15:23
trans-1,3-Dichloropropene	< 2.00	ug/L	6/24/2020 15:23
Trichloroethene	< 2.00	ug/L	6/24/2020 15:23
Trichlorofluoromethane	< 2.00	ug/L	6/24/2020 15:23
Vinyl chloride	< 2.00	ug/L	6/24/2020 15:23



**Lab Project ID:** 202600

**Client:** **Bergmann Associates**

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Sample Identifier:** Trip Blank T989

**Lab Sample ID:** 202600-10

**Date Sampled:** 6/11/2020

**Matrix:** Water

**Date Received:** 6/11/2020

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	<b>133</b>	80.8 - 132	*	6/24/2020	15:23
4-Bromofluorobenzene	<b>63.9</b>	56.6 - 130		6/24/2020	15:23
Pentafluorobenzene	<b>105</b>	87.4 - 113		6/24/2020	15:23
Toluene-D8	<b>76.3</b>	82.2 - 115	*	6/24/2020	15:23

**Method Reference(s):** EPA 8260C

EPA 5030C

**Data File:** x71228.D





***Method Blank Report***

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

***Mercury***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	<0.000200	mg/L		6/17/2020 06:16

**Method Reference(s):** EPA 7470A  
**Preparation Date:** 6/15/2020  
**Data File:** Hg200617A  
**QC Batch ID:** QC200615HgWater  
**QC Number:** 1



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Laboratory Control Sample and Control Sample Duplicate**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

**Mercury**

<u>Analyte</u>	<u>LCS</u>	<u>LCS D</u>	<u>Spike</u>	<u>LCS</u>	<u>LCS D</u>	<u>LCS %</u>	<u>LCS D %</u>	<u>% Rec</u>	<u>LCS</u>	<u>LCS D</u>	<u>Relative %</u>	<u>RPD</u>	<u>RPD</u>	<u>Date</u>
	<u>Added</u>	<u>Added</u>	<u>Units</u>	<u>Result</u>	<u>Result</u>	<u>Recovery</u>	<u>Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Outliers</u>	<u>Difference</u>	<u>Limit</u>	<u>Outliers</u>	<u>Analyzed</u>
Mercury	0.00200	0.00200	mg/L	0.00200	0.00201	99.9	100	80 - 120			0.611	20		6/17/2020
<b>Method Reference(s):</b> EPA 7470A														
<b>Preparation Date:</b> 6/15/2020														
<b>Data File:</b> Hg200617A														
<b>QC Number:</b> 1														
<b>QC Batch ID:</b> QC200615HgWater														

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**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Sample Spike and Sample Duplicate**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Sample ID:** 202600-01

**Sample Identifier:** MW-101

**Matrix:** Groundwater

**SDG #:** 2600-01

**Lab Project ID:** 202600

**Date Sampled:** 6/11/2020

**Date Received:** 6/11/2020

**Mercury**

<b>Analyte</b>	<b><u>Sample</u></b>	<b><u>Result</u></b>	<b><u>Spike</u></b>	<b><u>Spike</u></b>	<b><u>Spike</u></b>	<b><u>%Rec</u></b>	<b><u>Spike</u></b>	<b><u>Duplicate</u></b>	<b><u>Relative %</u></b>	<b><u>RPD</u></b>	<b><u>RPD</u></b>	<b><u>Date</u></b>
	<b><u>Results</u></b>	<b><u>Units</u></b>	<b><u>Added</u></b>	<b><u>Result</u></b>	<b><u>Recovery</u></b>	<b><u>Limits</u></b>	<b><u>Outliers</u></b>	<b><u>Result</u></b>	<b><u>Difference</u></b>	<b><u>Limit</u></b>	<b><u>Outliers</u></b>	<b><u>Analyzed</u></b>
Mercury	< 0.000200	mg/L	0.00200	0.00203	101	70 - 130		<0.000200	NC	20		6/17/2020
<b>Method Reference(s):</b>		EPA 7470A										
<b>Preparation Date:</b>		6/15/2020										
		Hg200617A										
<b>QC Batch ID:</b>		QC200615HgWater										

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

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Report Prepared Wednesday, June 17, 2020



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Sample Spike and Sample Duplicate**

**Client:** Bergmann Associates

**SDG #:** 2600-01

**Lab Project ID:** 202600

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Sample ID:** 202600-07

**Date Sampled:** 6/11/2020

**Sample Identifier:** MW-107

**Date Received:** 6/11/2020

**Matrix:** Groundwater

***Mercury***

<b>Analyte</b>	<b><u>Sample</u></b>	<b><u>Result</u></b>	<b><u>Spike</u></b>	<b><u>Spike</u></b>	<b><u>Spike</u></b>	<b><u>% Rec</u></b>	<b><u>Spike</u></b>	<b><u>Duplicate</u></b>	<b><u>Relative %</u></b>	<b><u>RPD</u></b>	<b><u>RPD</u></b>	<b><u>Date</u></b>
	<b><u>Results</u></b>	<b><u>Units</u></b>	<b><u>Added</u></b>	<b><u>Result</u></b>	<b><u>Recovery</u></b>	<b><u>Limits</u></b>	<b><u>Outliers</u></b>	<b><u>Result</u></b>	<b><u>Difference</u></b>	<b><u>Limit</u></b>	<b><u>Outliers</u></b>	<b><u>Analyzed</u></b>
Mercury	< 0.000200	mg/L	0.00200	0.00206	103	70 - 130		<0.000200	NC	20		6/17/2020
<b>Method Reference(s):</b>		EPA 7470A										
<b>Preparation Date:</b>		6/15/2020										
		Hg200617A										
<b>QC Batch ID:</b>		QC200615HgWater										

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

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Report Prepared Wednesday, June 17, 2020



***Method Blank Report***

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

***TAL Metals (ICP)***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	<0.100	mg/L		6/24/2020 14:14
Antimony	<0.0600	mg/L		6/24/2020 14:14
Arsenic	<0.0100	mg/L		6/24/2020 14:14
Barium	<0.100	mg/L		6/24/2020 14:14
Beryllium	<0.00500	mg/L		6/24/2020 14:14
Cadmium	<0.00500	mg/L		6/24/2020 14:14
Calcium	<2.50	mg/L		6/24/2020 14:14
Chromium	<0.0100	mg/L		6/24/2020 14:14
Cobalt	<0.0500	mg/L		6/24/2020 14:14
Copper	<0.0200	mg/L		6/24/2020 14:14
Iron	<0.100	mg/L		6/24/2020 14:14
Lead	<0.0100	mg/L		6/24/2020 14:14
Magnesium	<2.50	mg/L		6/24/2020 14:14
Manganese	<0.0150	mg/L		6/24/2020 14:14
Nickel	<0.0400	mg/L		6/24/2020 14:14
Potassium	<2.50	mg/L		6/24/2020 14:14
Selenium	<0.0200	mg/L		6/24/2020 14:14
Silver	<0.0100	mg/L		6/24/2020 14:14
Sodium	<2.50	mg/L		6/24/2020 14:14
Thallium	<0.0250	mg/L		6/24/2020 14:14
Vanadium	<0.0250	mg/L		6/24/2020 14:14
Zinc	<0.0600	mg/L		6/24/2020 14:14

**Method Reference(s):** EPA 6010C  
EPA 3005A  
**Preparation Date:** 6/12/2020  
**Data File:** 200624B  
**QC Batch ID:** QC200612water  
**QC Number:** 1

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**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Laboratory Control Sample and Control Sample Duplicate**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

***TAL Metals (ICP)***

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Aluminum	2.50	2.50	mg/L	2.49	2.41	99.6	96.4	80 - 120			3.24	20		6/24/2020
Antimony	2.50	2.50	mg/L	2.57	2.50	103	100	80 - 120			2.66	20		6/24/2020
Arsenic	2.50	2.50	mg/L	2.45	2.39	98.0	95.5	80 - 120			2.64	20		6/24/2020
Barium	2.50	2.50	mg/L	2.56	2.50	103	100	80 - 120			2.43	20		6/24/2020
Beryllium	0.500	0.500	mg/L	0.485	0.473	97.1	94.5	80 - 120			2.68	20		6/24/2020
Cadmium	1.00	1.00	mg/L	1.07	1.04	107	104	80 - 120			2.62	20		6/24/2020
Calcium	4.00	4.00	mg/L	3.99	3.94	99.7	98.6	80 - 120			1.14	20		6/24/2020
Chromium	2.50	2.50	mg/L	2.50	2.44	100	97.6	80 - 120			2.48	20		6/24/2020
Cobalt	1.00	1.00	mg/L	1.03	0.999	103	99.9	80 - 120			2.67	20		6/24/2020
Copper	2.50	2.50	mg/L	2.39	2.33	95.7	93.1	80 - 120			2.74	20		6/24/2020
Iron	2.50	2.50	mg/L	2.33	2.24	93.4	89.5	80 - 120			4.23	20		6/24/2020
Lead	2.50	2.50	mg/L	2.53	2.47	101	98.7	80 - 120			2.61	20		6/24/2020
Magnesium	8.00	8.00	mg/L	8.23	8.02	103	100	80 - 120			2.60	20		6/24/2020
Manganese	1.00	1.00	mg/L	1.03	1.00	103	100	80 - 120			2.73	20		6/24/2020
Nickel	5.00	5.00	mg/L	5.03	4.90	101	98.1	80 - 120			2.54	20		6/24/2020
Potassium	42.5	42.5	mg/L	42.7	42.1	101	99.0	80 - 120			1.55	20		6/24/2020

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Report Prepared Thursday, June 25, 2020





**Client:** **Bergmann Associates**

**Bergmann Associates**

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

Lab Project ID: 202600

SDG #: 2600-01

**Matrix:** Groundwater

## TAL Metals (ICP)

Method Reference(s):	EPA 6010C EPA 3005A
Preparation Date:	6/12/2020
Data File:	200624B
QC Number:	1
QC Batch ID:	QC200612water

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**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Sample Spike and Sample Duplicate**

**Client:** Bergmann Associates

**SDG #:** 2600-01

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**Lab Sample ID:** 202600-07

**Sample Identifier:** MW-107

**Matrix:** Groundwater

**Date Sampled:** 6/11/2020  
**Date Received:** 6/11/2020

***TAL Metals (ICP)***

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Aluminum	< 0.100	mg/L	2.50	2.55	102	75 - 125		<0.100	NC	20		6/24/2020
Antimony	< 0.0600	mg/L	2.50	2.63	105	75 - 125		<0.0600	NC	20		6/24/2020
Arsenic	0.00727	mg/L	2.50	2.58	103	75 - 125		<0.0100	NC	20		6/24/2020
Barium	0.121	mg/L	2.50	2.64	101	75 - 125		0.121	0.249	20		6/24/2020
Beryllium	< 0.00500	mg/L	0.500	0.478	95.7	75 - 125		<0.00500	NC	20		6/24/2020
Cadmium	< 0.00500	mg/L	1.00	1.00	100	75 - 125		<0.00500	NC	20		6/24/2020
Calcium	279	mg/L	4.00	282	NC	75 - 125		282	1.23	20		6/24/2020
Chromium	< 0.0100	mg/L	2.50	2.46	98.3	75 - 125		<0.0100	NC	20		6/24/2020
Cobalt	< 0.0500	mg/L	1.00	0.980	98.0	75 - 125		<0.0500	NC	20		6/24/2020
Copper	< 0.0200	mg/L	2.50	2.44	97.7	75 - 125		<0.0200	NC	20		6/24/2020
Iron	3.80	mg/L	2.50	5.88	83.4	75 - 125		3.82	0.477	20		6/24/2020
Lead	< 0.0100	mg/L	2.50	2.46	98.3	75 - 125		<0.0100	NC	20		6/24/2020
Magnesium	44.5	mg/L	8.00	52.8	103	75 - 125		45.0	0.930	20		6/24/2020
Manganese	0.394	mg/L	1.00	1.40	101	75 - 125		0.399	1.28	20		6/24/2020

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

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Report Prepared Thursday, June 25, 2020



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Sample Spike and Sample Duplicate**

**Client:** Bergmann Associates

**SDG #:** 2600-01

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**Lab Sample ID:** 202600-07

**Date Sampled:** 6/11/2020

**Sample Identifier:** MW-107

**Date Received:** 6/11/2020

**Matrix:** Groundwater

***TAL Metals (ICP)***

Analyte	Sample	Result	Spike	Spike	Spike %	% Rec	Spike	Duplicate	Relative %	RPD	RPD	Date
	Results	Units	Added	Result	Recovery	Limits	Outliers	Result	Difference	Limit	Outliers	Analyzed
Nickel	< 0.0400	mg/L	5.00	4.74	94.9	75 - 125		<0.0400	NC	20		6/24/2020
Potassium	9.61	mg/L	42.5	52.7	101	75 - 125		9.59	0.210	20		6/24/2020
Selenium	< 0.0200	mg/L	2.50	2.59	104	75 - 125		<0.0200	NC	20		6/24/2020
Silver	< 0.0100	mg/L	0.250	0.253	101	75 - 125		<0.0100	NC	20		6/24/2020
Sodium	104	mg/L	12.0	115	91.4	75 - 125		105	0.635	20		6/24/2020
Thallium	< 0.0250	mg/L	2.50	2.52	101	75 - 125		<0.0250	NC	20		6/24/2020
Vanadium	< 0.0250	mg/L	1.00	0.983	98.3	75 - 125		<0.0250	NC	20		6/24/2020
Zinc	< 0.0600	mg/L	2.50	2.46	98.3	75 - 125		<0.0600	NC	20		6/24/2020

**Method Reference(s):** EPA 6010C

EPA 3005A

**Preparation Date:** 6/12/2020

200624B

**QC Batch ID:** QC200612water

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

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Report Prepared Thursday, June 25, 2020



***Method Blank Report***

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

***Semi-Volatile Organics (Acid/Base Neutrals)***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
1,1-Biphenyl	<10.0	ug/L		6/19/2020 06:58
1,2,4,5-Tetrachlorobenzene	<10.0	ug/L		6/19/2020 06:58
1,2,4-Trichlorobenzene	<10.0	ug/L		6/19/2020 06:58
1,2-Dichlorobenzene	<10.0	ug/L		6/19/2020 06:58
1,3-Dichlorobenzene	<10.0	ug/L		6/19/2020 06:58
1,4-Dichlorobenzene	<10.0	ug/L		6/19/2020 06:58
2,2-Oxybis (1-chloropropane)	<10.0	ug/L		6/19/2020 06:58
2,3,4,6-Tetrachlorophenol	<10.0	ug/L		6/19/2020 06:58
2,4,5-Trichlorophenol	<20.0	ug/L		6/19/2020 06:58
2,4,6-Trichlorophenol	<10.0	ug/L		6/19/2020 06:58
2,4-Dichlorophenol	<10.0	ug/L		6/19/2020 06:58
2,4-Dimethylphenol	<20.0	ug/L		6/19/2020 06:58
2,4-Dinitrophenol	<20.0	ug/L		6/19/2020 06:58
2,4-Dinitrotoluene	<10.0	ug/L		6/19/2020 06:58
2,6-Dinitrotoluene	<10.0	ug/L		6/19/2020 06:58
2-Chloronaphthalene	<10.0	ug/L		6/19/2020 06:58
2-Chlorophenol	<10.0	ug/L		6/19/2020 06:58
2-Methylnaphthalene	<10.0	ug/L		6/19/2020 06:58
2-Methylphenol	<10.0	ug/L		6/19/2020 06:58
2-Nitroaniline	<20.0	ug/L		6/19/2020 06:58
2-Nitrophenol	<10.0	ug/L		6/19/2020 06:58
3&4-Methylphenol	<10.0	ug/L		6/19/2020 06:58
3,3'-Dichlorobenzidine	<10.0	ug/L		6/19/2020 06:58
3-Nitroaniline	<20.0	ug/L		6/19/2020 06:58
4,6-Dinitro-2-methylphenol	<20.0	ug/L		6/19/2020 06:58
4-Bromophenyl phenyl ether	<10.0	ug/L		6/19/2020 06:58
4-Chloro-3-methylphenol	<10.0	ug/L		6/19/2020 06:58
4-Chloroaniline	<10.0	ug/L		6/19/2020 06:58

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***Method Blank Report***

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

***Semi-Volatile Organics (Acid/Base Neutrals)***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
4-Chlorophenyl phenyl ether	<10.0	ug/L		6/19/2020 06:58
4-Nitroaniline	<20.0	ug/L		6/19/2020 06:58
4-Nitrophenol	<20.0	ug/L		6/19/2020 06:58
Acenaphthene	<10.0	ug/L		6/19/2020 06:58
Acenaphthylene	<10.0	ug/L		6/19/2020 06:58
Acetophenone	<10.0	ug/L		6/19/2020 06:58
Anthracene	<10.0	ug/L		6/19/2020 06:58
Atrazine	<10.0	ug/L		6/19/2020 06:58
Benzaldehyde	<10.0	ug/L		6/19/2020 06:58
Benzo (a) anthracene	<10.0	ug/L		6/19/2020 06:58
Benzo (a) pyrene	<10.0	ug/L		6/19/2020 06:58
Benzo (b) fluoranthene	<10.0	ug/L		6/19/2020 06:58
Benzo (g,h,i) perylene	<10.0	ug/L		6/19/2020 06:58
Benzo (k) fluoranthene	<10.0	ug/L		6/19/2020 06:58
Bis (2-chloroethoxy) methane	<10.0	ug/L		6/19/2020 06:58
Bis (2-chloroethyl) ether	<10.0	ug/L		6/19/2020 06:58
Bis (2-ethylhexyl) phthalate	<10.0	ug/L		6/19/2020 06:58
Butylbenzylphthalate	<10.0	ug/L		6/19/2020 06:58
Caprolactam	<10.0	ug/L		6/19/2020 06:58
Carbazole	<10.0	ug/L		6/19/2020 06:58
Chrysene	<10.0	ug/L		6/19/2020 06:58
Dibenz (a,h) anthracene	<10.0	ug/L		6/19/2020 06:58
Dibenzofuran	<10.0	ug/L		6/19/2020 06:58
Diethyl phthalate	<10.0	ug/L		6/19/2020 06:58
Dimethyl phthalate	<20.0	ug/L		6/19/2020 06:58
Di-n-butyl phthalate	<10.0	ug/L		6/19/2020 06:58
Di-n-octylphthalate	<10.0	ug/L		6/19/2020 06:58
Fluoranthene	<10.0	ug/L		6/19/2020 06:58

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**Method Blank Report**

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

**Semi-Volatile Organics (Acid/Base Neutrals)**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Fluorene	<10.0	ug/L		6/19/2020 06:58
Hexachlorobenzene	<10.0	ug/L		6/19/2020 06:58
Hexachlorobutadiene	<10.0	ug/L		6/19/2020 06:58
Hexachlorocyclopentadiene	<10.0	ug/L		6/19/2020 06:58
Hexachloroethane	<10.0	ug/L		6/19/2020 06:58
Indeno (1,2,3-cd) pyrene	<10.0	ug/L		6/19/2020 06:58
Isophorone	<10.0	ug/L		6/19/2020 06:58
Naphthalene	<10.0	ug/L		6/19/2020 06:58
Nitrobenzene	<10.0	ug/L		6/19/2020 06:58
N-Nitroso-di-n-propylamine	<10.0	ug/L		6/19/2020 06:58
N-Nitrosodiphenylamine	<10.0	ug/L		6/19/2020 06:58
Pentachlorophenol	<20.0	ug/L		6/19/2020 06:58
Phenanthrene	<10.0	ug/L		6/19/2020 06:58
Phenol	<10.0	ug/L		6/19/2020 06:58
Pyrene	<10.0	ug/L		6/19/2020 06:58

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2,4,6-Tribromophenol	75.3	61.4 - 115		6/19/2020 06:58
2-Fluorobiphenyl	50.5	38.4 - 101		6/19/2020 06:58
2-Fluorophenol	39.6	12.7 - 105		6/19/2020 06:58
Nitrobenzene-d5	68.5	57.3 - 100		6/19/2020 06:58
Phenol-d5	27.2	10 - 107		6/19/2020 06:58
Terphenyl-d14	74.4	58.1 - 117		6/19/2020 06:58

**Method Reference(s):** EPA 8270D  
EPA 3510C  
**Preparation Date:** 6/17/2020  
**Data File:** B47268.D  
**QC Batch ID:** QC200617ABNW  
**QC Number:** 1





**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Laboratory Control Sample**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

**Semi-Volatile Organics (Acid/Base Neutrals)**

<u>Analyte</u>	<u>Spike Added</u>	<u>Spike Units</u>	<u>LCS Result</u>	<u>LCS % Recovery</u>	<u>% Rec Limits</u>	<u>LCS Outliers</u>	<u>Date Analyzed</u>
1,2,4-Trichlorobenzene	50.0	ug/L	22.2	44.4	35.2 - 98.2		6/19/2020
1,4-Dichlorobenzene	50.0	ug/L	18.4	36.8	25.3 - 96.3		6/19/2020
2,3,4,6-Tetrachlorophenol	75.0	ug/L	55.6	74.1	58.9 - 114		6/19/2020
2,4,6-Trichlorophenol	75.0	ug/L	60.0	80.0	65.8 - 118		6/19/2020
2,4-Dichlorophenol	75.0	ug/L	54.4	72.5	63.5 - 106		6/19/2020
2,4-Dimethylphenol	75.0	ug/L	58.1	77.5	50.2 - 122		6/19/2020
2,4-Dinitrophenol	75.0	ug/L	38.7	51.6	17.1 - 131		6/19/2020
2,4-Dinitrotoluene	50.0	ug/L	37.5	75.0	62.6 - 111		6/19/2020
2-Chlorophenol	75.0	ug/L	48.0	64.1	53.9 - 104		6/19/2020
2-Nitrophenol	75.0	ug/L	54.9	73.1	62.4 - 105		6/19/2020
4,6-Dinitro-2-methylphenol	75.0	ug/L	50.2	66.9	29.8 - 134		6/19/2020
4-Chloro-3-methylphenol	75.0	ug/L	56.4	75.2	63.1 - 111		6/19/2020
4-Nitrophenol	75.0	ug/L	22.8	30.3	10 - 125		6/19/2020
Acenaphthene	50.0	ug/L	32.3	64.6	59.2 - 103		6/19/2020
N-Nitroso-di-n-propylamine	50.0	ug/L	36.1	72.1	62.4 - 105		6/19/2020
Pentachlorophenol	75.0	ug/L	64.8	86.5	48 - 151		6/19/2020

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**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

***QC Report for Laboratory Control Sample***

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

***Semi-Volatile Organics (Acid/Base Neutrals)***

<u>Analyte</u>	<u>Spike Added</u>	<u>Spike Units</u>	<u>LCS Result</u>	<u>LCS % Recovery</u>	<u>% Rec Limits</u>	<u>LCS Outliers</u>	<u>Date Analyzed</u>
Phenol	75.0	ug/L	21.0	28.0	10 - 112		6/19/2020
Pyrene	50.0	ug/L	37.4	74.8	63.7 - 111		6/19/2020
<b>Method Reference(s):</b> EPA 8270D EPA 3510C							
<b>Preparation Date:</b> 6/17/2020							
<b>Data File:</b> B47269.D							
<b>QC Number:</b> 1							
<b>QC Batch ID:</b> QC200617ABNW							

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***QC Report for Matrix Spike and Matrix Spike Duplicate***

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Sample ID:** 202600-07

**Sample Identifier:** MW-107

**Matrix:** Groundwater

**SDG #:** 2600-01

**Lab Project ID:** 202600

**Date Sampled:** 6/11/2020

**Date Received:** 6/11/2020

**Date Analyzed:** 6/19/2020

***Semi-Volatile Organics (Acid/Base Neutrals)***

Analyte	Sample Result	Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier
1,2,4-Trichlorobenzene	< 9.68	ug/L	48.6	25.5	52.5	48.8	24.6	50.3	35.2 - 98.2			4.10	60.9	
1,4-Dichlorobenzene	< 9.68	ug/L	48.6	20.6	42.5	48.8	19.6	40.1	25.3 - 96.3			5.74	76.5	
2,3,4,6-Tetrachlorophenol	< 9.68	ug/L	72.9	54.5	74.7	73.2	53.8	73.4	58.9 - 114			1.76	32.1	
2,4,6-Trichlorophenol	< 9.68	ug/L	72.9	54.7	75.0	73.2	53.6	73.2	65.8 - 118			2.45	27.4	
2,4-Dichlorophenol	< 9.68	ug/L	72.9	45.8	62.8	73.2	44.7	61.0	63.5 - 106	*	*	2.89	25.5	
2,4-Dimethylphenol	< 19.4	ug/L	72.9	37.5	51.4	73.2	42.9	58.6	50.2 - 122			13.1	49.7	
2,4-Dinitrophenol	< 19.4	ug/L	72.9	48.3	66.2	73.2	46.8	63.9	17.1 - 131			3.61	99.3	
2,4-Dinitrotoluene	< 9.68	ug/L	48.6	35.9	73.8	48.8	35.0	71.7	62.6 - 111			2.88	28.9	
2-Chlorophenol	< 9.68	ug/L	72.9	36.8	50.4	73.2	35.1	47.9	53.9 - 104	*	*	5.06	38.7	
2-Nitrophenol	< 9.68	ug/L	72.9	50.5	69.2	73.2	49.9	68.1	62.4 - 105			1.62	27.8	
4,6-Dinitro-2-methylphenol	< 19.4	ug/L	72.9	51.6	70.7	73.2	52.8	72.1	29.8 - 134			1.94	84.8	
4-Chloro-3-methylphenol	< 9.68	ug/L	72.9	42.4	58.1	73.2	41.7	56.9	63.1 - 111	*	*	2.19	27.3	
4-Nitrophenol	< 19.4	ug/L	72.9	19.1	26.2	73.2	18.6	25.4	10 - 125			3.02	152	
Acenaphthene	< 9.68	ug/L	48.6	31.6	65.1	48.8	31.3	64.1	59.2 - 103			1.56	34.3	

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

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Report Prepared Friday, June 19, 2020



*QC Report for Matrix Spike and Matrix Spike Duplicate*

Client: Bergmann Associates

SDG #: 2600-01

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Lab Project ID: 202600

Lab Sample ID: 202600-07

Sample Identifier: MW-107

Matrix: Groundwater

Date Sampled: 6/11/2020

Date Received: 6/11/2020

Date Analyzed: 6/19/2020

*Semi-Volatile Organics (Acid/Base Neutrals)*

Analyte	Sample	Result	Units	MS	MS	MS	MS %	MSD	MSD	MSD	MSD %	% Rec.	MS	MSD	Relative	RPD	RPD
		Result	Units	Added	Result	Recovery	Added	Result	Recovery	Limits	Outlier	Outlier	% Diff.	Limit	Outlier		
N-Nitroso-di-n-propylamine	< 9.68	ug/L	48.6	33.5	68.9	48.8	33.3	68.3	62.4 - 105	0.961	29.4						
Pentachlorophenol	< 19.4	ug/L	72.9	67.3	92.4	73.2	68.1	92.9	48 - 151	0.634	63.3						
Phenol	< 9.68	ug/L	72.9	15.0	20.6	73.2	14.5	19.8	10 - 112	3.95	150						
Pyrene	< 9.68	ug/L	48.6	32.8	67.6	48.8	32.4	66.3	63.7 - 111	1.84	31.9						

Method Reference(s): EPA 8270D

EPA 3510C

Preparation Date: 6/17/2020

Data File(s): B47270.D

B47271.D

B47207.D

1

QC Batch ID: QC200617ABNW

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Friday, June 19, 2020



**Method Blank Report**

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

**Volatile Organics**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
1,1,1-Trichloroethane	<2.00	ug/L		6/24/2020 12:33
1,1,2,2-Tetrachloroethane	<2.00	ug/L		6/24/2020 12:33
1,1,2-Trichloroethane	<2.00	ug/L		6/24/2020 12:33
1,1-Dichloroethane	<2.00	ug/L		6/24/2020 12:33
1,1-Dichloroethene	<2.00	ug/L		6/24/2020 12:33
1,2,3-Trichlorobenzene	<5.00	ug/L		6/24/2020 12:33
1,2,4-Trichlorobenzene	<5.00	ug/L		6/24/2020 12:33
1,2-Dibromo-3-Chloropropane	<10.0	ug/L		6/24/2020 12:33
1,2-Dibromoethane	<2.00	ug/L		6/24/2020 12:33
1,2-Dichlorobenzene	<2.00	ug/L		6/24/2020 12:33
1,2-Dichloroethane	<2.00	ug/L		6/24/2020 12:33
1,2-Dichloropropane	<2.00	ug/L		6/24/2020 12:33
1,3-Dichlorobenzene	<2.00	ug/L		6/24/2020 12:33
1,4-Dichlorobenzene	<2.00	ug/L		6/24/2020 12:33
1,4-Dioxane	<20.0	ug/L		6/24/2020 12:33
2-Butanone	<10.0	ug/L		6/24/2020 12:33
2-Hexanone	<5.00	ug/L		6/24/2020 12:33
4-Methyl-2-pentanone	<5.00	ug/L		6/24/2020 12:33
Acetone	<10.0	ug/L		6/24/2020 12:33
Benzene	<1.00	ug/L		6/24/2020 12:33
Bromochloromethane	<5.00	ug/L		6/24/2020 12:33
Bromodichloromethane	<2.00	ug/L		6/24/2020 12:33
Bromoform	<5.00	ug/L		6/24/2020 12:33
Bromomethane	<2.00	ug/L		6/24/2020 12:33
Carbon disulfide	<2.00	ug/L		6/24/2020 12:33
Carbon Tetrachloride	<2.00	ug/L		6/24/2020 12:33
Chlorobenzene	<2.00	ug/L		6/24/2020 12:33

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



***Method Blank Report***

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

***Volatile Organics***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloroethane	<2.00	ug/L		6/24/2020 12:33
Chloroform	<2.00	ug/L		6/24/2020 12:33
Chloromethane	<2.00	ug/L		6/24/2020 12:33
cis-1,2-Dichloroethene	<2.00	ug/L		6/24/2020 12:33
cis-1,3-Dichloropropene	<2.00	ug/L		6/24/2020 12:33
Cyclohexane	<10.0	ug/L		6/24/2020 12:33
Dibromochloromethane	<2.00	ug/L		6/24/2020 12:33
Dichlorodifluoromethane	<2.00	ug/L		6/24/2020 12:33
Ethylbenzene	<2.00	ug/L		6/24/2020 12:33
Freon 113	<2.00	ug/L		6/24/2020 12:33
Isopropylbenzene	<2.00	ug/L		6/24/2020 12:33
m,p-Xylene	<2.00	ug/L		6/24/2020 12:33
Methyl acetate	<2.00	ug/L		6/24/2020 12:33
Methyl tert-butyl Ether	<2.00	ug/L		6/24/2020 12:33
Methylcyclohexane	<2.00	ug/L		6/24/2020 12:33
Methylene chloride	<5.00	ug/L		6/24/2020 12:33
o-Xylene	<2.00	ug/L		6/24/2020 12:33
Styrene	<5.00	ug/L		6/24/2020 12:33
Tetrachloroethene	<2.00	ug/L		6/24/2020 12:33
Toluene	<2.00	ug/L		6/24/2020 12:33
trans-1,2-Dichloroethene	<2.00	ug/L		6/24/2020 12:33
trans-1,3-Dichloropropene	<2.00	ug/L		6/24/2020 12:33
Trichloroethene	<2.00	ug/L		6/24/2020 12:33
Trichlorofluoromethane	<2.00	ug/L		6/24/2020 12:33
Vinyl chloride	<2.00	ug/L		6/24/2020 12:33





***Method Blank Report***

**Client:** Bergmann Associates  
**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave  
**Lab Project ID:** 202600  
**SDG #:** 2600-01  
**Matrix:** Groundwater

***Volatile Organics***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
1,2-Dichloroethane-d4	118	80.8 - 132		6/24/2020 12:33
4-Bromofluorobenzene	66.6	56.6 - 130		6/24/2020 12:33
Pentafluorobenzene	101	87.4 - 113		6/24/2020 12:33
Toluene-D8	82.5	82.2 - 115		6/24/2020 12:33

**Method Reference(s):** EPA 8260C  
EPA 5030C  
**Data File:** x71221.D  
**QC Batch ID:** voaw200624  
**QC Number:** 1



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Laboratory Control Sample**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

***Volatile Organics***

<u>Analyte</u>	<u>Spike Added</u>	<u>Spike Units</u>	<u>LCS Result</u>	<u>LCS % Recovery</u>	<u>% Rec Limits</u>	<u>LCS Outliers</u>	<u>Date Analyzed</u>
1,1,1-Trichloroethane	20.0	ug/L	22.0	110	68.9 - 126		6/24/2020
1,1,2,2-Tetrachloroethane	20.0	ug/L	25.0	125	67.7 - 136		6/24/2020
1,1,2-Trichloroethane	20.0	ug/L	23.8	119	71.2 - 130		6/24/2020
1,1-Dichloroethane	20.0	ug/L	23.6	118	69.6 - 130		6/24/2020
1,1-Dichloroethene	20.0	ug/L	23.2	116	61.5 - 124		6/24/2020
1,2-Dichlorobenzene	20.0	ug/L	21.8	109	70.8 - 125		6/24/2020
1,2-Dichloroethane	20.0	ug/L	24.8	124	69.5 - 139		6/24/2020
1,2-Dichloropropane	20.0	ug/L	21.0	105	73.5 - 120		6/24/2020
1,3-Dichlorobenzene	20.0	ug/L	19.9	99.6	68.2 - 121		6/24/2020
1,4-Dichlorobenzene	20.0	ug/L	20.7	104	65.2 - 119		6/24/2020
Benzene	20.0	ug/L	24.3	122	75 - 128		6/24/2020
Bromodichloromethane	20.0	ug/L	19.5	97.3	70.1 - 126		6/24/2020
Bromoform	20.0	ug/L	17.6	88.0	52 - 128		6/24/2020
Bromomethane	20.0	ug/L	29.5	147	56 - 149		6/24/2020
Carbon Tetrachloride	20.0	ug/L	22.2	111	66.2 - 129		6/24/2020
Chlorobenzene	20.0	ug/L	24.2	121	71.1 - 124		6/24/2020

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**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

***QC Report for Laboratory Control Sample***

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

***Volatile Organics***

<u>Analyte</u>	<u>Spike Added</u>	<u>Spike Units</u>	<u>LCS Result</u>	<u>LCS % Recovery</u>	<u>% Rec Limits</u>	<u>LCS Outliers</u>	<u>Date Analyzed</u>
Chloroethane	20.0	ug/L	26.9	135	60.2 - 135		6/24/2020
Chloroform	20.0	ug/L	24.7	123	74.5 - 130		6/24/2020
Chloromethane	20.0	ug/L	31.6	158	38.6 - 159		6/24/2020
cis-1,3-Dichloropropene	20.0	ug/L	14.6	72.8	58 - 113		6/24/2020
Dibromochloromethane	20.0	ug/L	18.1	90.3	61.6 - 134		6/24/2020
Ethylbenzene	20.0	ug/L	22.8	114	70.6 - 130		6/24/2020
Methylene chloride	20.0	ug/L	27.3	136	61.4 - 143		6/24/2020
Tetrachloroethene	20.0	ug/L	21.8	109	63.4 - 139		6/24/2020
Toluene	20.0	ug/L	22.6	113	75.8 - 130		6/24/2020
trans-1,2-Dichloroethene	20.0	ug/L	25.1	125	67.6 - 131		6/24/2020
trans-1,3-Dichloropropene	20.0	ug/L	14.2	71.2	55.8 - 118		6/24/2020
Trichloroethene	20.0	ug/L	21.7	108	72.6 - 122		6/24/2020
Trichlorofluoromethane	20.0	ug/L	28.2	141	63.8 - 142		6/24/2020
Vinyl chloride	20.0	ug/L	26.9	135	58.5 - 142		6/24/2020

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

**QC Report for Laboratory Control Sample**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Project ID:** 202600

**SDG #:** 2600-01

**Matrix:** Groundwater

***Volatile Organics***

Analyte	Method Reference(s):	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
	EPA 8260C							
	EPA 5030C							
Data File:	x71220.D							
QC Number:	1							
QC Batch ID:	voaw200624							

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

## *QC Report for Matrix Spike and Matrix Spike Duplicate*

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Sample ID:** 202600-07

**Sample Identifier:** MW-107

**Matrix:** Groundwater

**SDG #:** 2600-01

**Lab Project ID:** 202600

**Date Sampled:** 6/11/2020

**Date Received:** 6/11/2020

**Date Analyzed:** 6/24/2020

### *Volatile Organics*

Analyte	Sample	Result	Units	Added	MS	Result	Recovery	Added	MSD	Result	Recovery	MSD %	% Rec.	Limits	MS	MSD	Relative % Diff.	RPD	RPD	Outlier
1,1,1-Trichloroethane	< 2.00	ug/L	50.0	51.6	103	50.0	53.6	107	68.9	- 126	3.76	28.1								
1,1,2,2-Tetrachloroethane	< 2.00	ug/L	50.0	64.0	128	50.0	63.8	128	67.7	- 136	0.343	34.8								
1,1,2-Trichloroethane	< 2.00	ug/L	50.0	59.2	118	50.0	60.4	121	71.2	- 130	2.03	29.8								
1,1-Dichloroethane	< 2.00	ug/L	50.0	53.7	107	50.0	55.1	110	69.6	- 130	2.47	30.1								
1,1-Dichloroethene	< 2.00	ug/L	50.0	51.1	102	50.0	54.3	109	61.5	- 124	6.17	32.3								
1,2-Dichlorobenzene	< 2.00	ug/L	50.0	48.3	96.7	50.0	53.2	106	70.8	- 125	9.51	26								
1,2-Dichloroethane	< 2.00	ug/L	50.0	57.9	116	50.0	58.3	117	69.5	- 139	0.607	29.4								
1,2-Dichloropropane	< 2.00	ug/L	50.0	50.4	101	50.0	53.0	106	73.5	- 120	5.10	23.4								
1,3-Dichlorobenzene	< 2.00	ug/L	50.0	44.3	88.7	50.0	49.0	98.1	68.2	- 121	10.1	26.1								
1,4-Dichlorobenzene	< 2.00	ug/L	50.0	44.6	89.3	50.0	49.9	99.8	65.2	- 119	11.1	26.7								
Benzene	< 1.00	ug/L	50.0	56.5	113	50.0	58.5	117	75	- 128	3.51	23								
Bromodichloromethane	< 2.00	ug/L	50.0	52.3	105	50.0	53.0	106	70.1	- 126	1.28	25.6								
Bromoform	< 5.00	ug/L	50.0	47.9	95.8	50.0	49.5	99.0	52	- 128	3.28	34.2								
Bromomethane	< 2.00	ug/L	50.0	68.4	137	50.0	70.0	140	56	- 149	2.30	27.9								

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

**QC Report for Matrix Spike and Matrix Spike Duplicate**

**Client:** Bergmann Associates

**Project Reference:** 2020 Annual Sampling Event VOA 214 Lake Ave

**Lab Sample ID:** 202600-07  
**Sample Identifier:** MW-107  
**Matrix:** Groundwater

**SDG #:** 2600-01  
**Lab Project ID:** 202600

**Date Sampled:** 6/11/2020  
**Date Received:** 6/11/2020  
**Date Analyzed:** 6/24/2020

***Volatile Organics***

Analyte	Sample	Result	Units	Added	MS	MS	MS %	MSD	MSD	MSD %	% Rec.	MS	MSD	Relative % Diff.	RPD	RPD
Carbon Tetrachloride	< 2.00	ug/L	50.0	54.8	110	50.0	55.2	110	66.2	- 129				0.699	30.2	
Chlorobenzene	< 2.00	ug/L	50.0	55.7	111	50.0	58.0	116	71.1	- 124				4.08	23.6	
Chloroethane	< 2.00	ug/L	50.0	63.8	128	50.0	67.8	136	60.2	- 135		*		6.09	34.5	
Chloroform	< 2.00	ug/L	50.0	58.4	117	50.0	59.4	119	74.5	- 130				1.64	24.1	
Chloromethane	< 2.00	ug/L	50.0	70.0	140	50.0	74.6	149	38.6	- 159				6.27	33.2	
cis-1,3-Dichloropropene	< 2.00	ug/L	50.0	37.1	74.1	50.0	41.4	82.8	58	- 113				11.1	28.3	
Dibromochloromethane	< 2.00	ug/L	50.0	53.3	107	50.0	54.3	109	61.6	- 134				1.87	29.2	
Ethylbenzene	< 2.00	ug/L	50.0	57.6	115	50.0	60.3	121	70.6	- 130				4.70	25.6	
Methylene chloride	< 5.00	ug/L	50.0	64.5	129	50.0	66.2	132	61.4	- 143				2.67	37.7	
Tetrachloroethene	< 2.00	ug/L	50.0	49.0	97.9	50.0	51.5	103	63.4	- 139				5.05	29.7	
Toluene	< 2.00	ug/L	50.0	55.7	111	50.0	58.0	116	75.8	- 130				4.14	23.8	
trans-1,2-Dichloroethene	< 2.00	ug/L	50.0	57.2	114	50.0	60.1	120	67.6	- 131				5.04	29.5	
trans-1,3-Dichloropropene	< 2.00	ug/L	50.0	39.6	79.2	50.0	43.2	86.4	55.8	- 118				8.62	28.8	
Trichloroethene	< 2.00	ug/L	50.0	49.1	98.2	50.0	53.0	106	72.6	- 122				7.57	23.9	

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

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*QC Report for Matrix Spike and Matrix Spike Duplicate*

Client: Bergmann Associates

Project Reference: 2020 Annual Sampling Event VOA 214 Lake Ave

Lab Sample ID: 202600-07

Sample Identifier: MW-107

Matrix: Groundwater

*Volatile Organics*

Analyte	Sample	Result	MS	MS	MS %	MSD	MSD	MSD %	% Rec.	MS	MSD	Relative	RPD	RPD
	Result	Units	Added	Result	Recovery	Added	Result	Recovery	Limits	Outlier	Outlier	% Diff.	Limit	Outlier
Trichlorofluoromethane	< 2.00	ug/L	50.0	66.0	132	50.0	68.3	137	63.8 - 142			3.55	34.1	
Vinyl chloride	< 2.00	ug/L	50.0	58.0	116	50.0	65.8	132	58.5 - 142			12.5	30.8	

Method Reference(s): EPA 8260C

EPA 5030C

Data File(s):

x71238.D

x71239.D

x71229a.D

1

QC Batch ID:

voaw200624

SDG #: 2600-01

Lab Project ID: 202600

Date Sampled: 6/11/2020

Date Received: 6/11/2020

Date Analyzed: 6/24/2020

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, June 25, 2020





## Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

*"<" = Analyzed for but not detected at or above the quantitation limit.*

*"E" = Result has been estimated, calibration limit exceeded.*

*"Z" = See case narrative.*

*"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.*

*"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.*

*"B" = Method blank contained trace levels of analyte. Refer to included method blank report.*

*"J" = Result estimated between the quantitation limit and half the quantitation limit.*

*"L" = Laboratory Control Sample recovery outside accepted QC limits.*

*"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.*

*"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.*

*"\*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

*"(1)" = Indicates data from primary column used for QC calculation.*

*"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.*

*"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.*

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Report Prepared Thursday, June 25, 2020

# GENERAL TERMS AND CONDITIONS

## LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

### Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

### Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

### Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

### Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

### Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

### Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

### Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

### Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

### Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

### Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

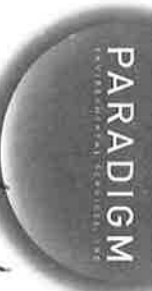
This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, June 25, 2020

# CHAIN OF CUSTODY

Page 1 of 2

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2020 Annual Sampling Event  
Vot 214 Lake Ave  
Back Lot

REPORT TO:		INVOICE TO:	
CLIENT: <u>Bergmann</u>	CLIENT: <u>Bergmann</u>	LAB PROJECT ID: <u>202000</u>	
ADDRESS: <u>280 E. Bond Street</u>	ADDRESS: <u>280 E. Bond Street</u>	Quotation #: <u>202000</u>	
CITY: <u>Rochester</u>	CITY: <u>Rochester</u>	STATE: <u>NY</u>	ZIP: <u>14604</u>
PHONE: <u>585 233-2396</u>	PHONE: <u>585 233-2396</u>	Email: <u>Steve.Dewler</u>	
ATTN: <u>Steve Dewler</u>	ATTN: <u>Steve Dewler</u>		
Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid		WA - Water WG - Groundwater	SW - Drinking Water WW - Wastewater
		SO - Soil SL - Sludge	SD - Solid PT - Paint
		WP - Wipe CK - Caulk	OL - Oil AR - Air

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GARB	SAMPLE IDENTIFIER	MCATDRES	NOBENT	REQUESTED ANALYSIS	REMARKS	PARADIGM LAB SAMPLE NUMBER
6/11/20	1045	X	X	MW-101	WG	4	X		01
6/11/20	1105	X	X	MWR-101	WG	4	X		02
6/11/20	1200	X	X	MW-103	WG	4	X		03
6/11/20	1245	X	X	MW-102	WG	4	X		04
6/11/20	1305	X	X	MWR-102	WG	4	X		05
6/11/20	1315	X	X	MW-10	WG	4	X		06
6/11/20	1345	X	X	MW-107	WG	4	X		07
6/11/20	1345	X	X	MW-107 MS	WG	4	X		07
6/11/20	1345	X	X	MW-107 MSD	WG	4	X		08
6/11/20	1415	X	X	MW-105	WG	4	X		08

Stephen Dewler

ASP CAT A

100% of all samples in field were analyzed within 1550 minutes of collection

Turnaround Time	Report Supplements
Standard 5 day	None Required
10 day	Batch QC
Rush 3 day	Category A
Rush 2 day	Category B
Rush 1 day	Other
Date Needed	Other EDD

Sampled By: <u>Stephen Dewler</u>	Date/Time: <u>6/11/20 1540</u>
Refined/Revised By: <u>Stephen Dewler</u>	Date/Time: <u>6/11/20 1540</u>
Received @ Lab By: <u>Stephen Dewler</u>	Date/Time: <u>6/11/20 1722</u>

See additional page for sample conditions.



## Chain of Custody Supplement

Client:

Bergmann

Completed by:

Molly Vail

Lab Project ID:

202600

Date:

6/1/2020

### Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	<i>NELAC compliance with the sample condition requirements upon receipt</i>		
	Yes	No	N/A
Container Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	<hr/>		
Transferred to method-compliant container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Headspace (<1 mL)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	<hr/>		
Preservation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	<hr/>		
Chlorine Absent (<0.10 ppm per test strip)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	<hr/>		
Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	<hr/>		
Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	<hr/>		
Compliant Sample Quantity/Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	<hr/>		