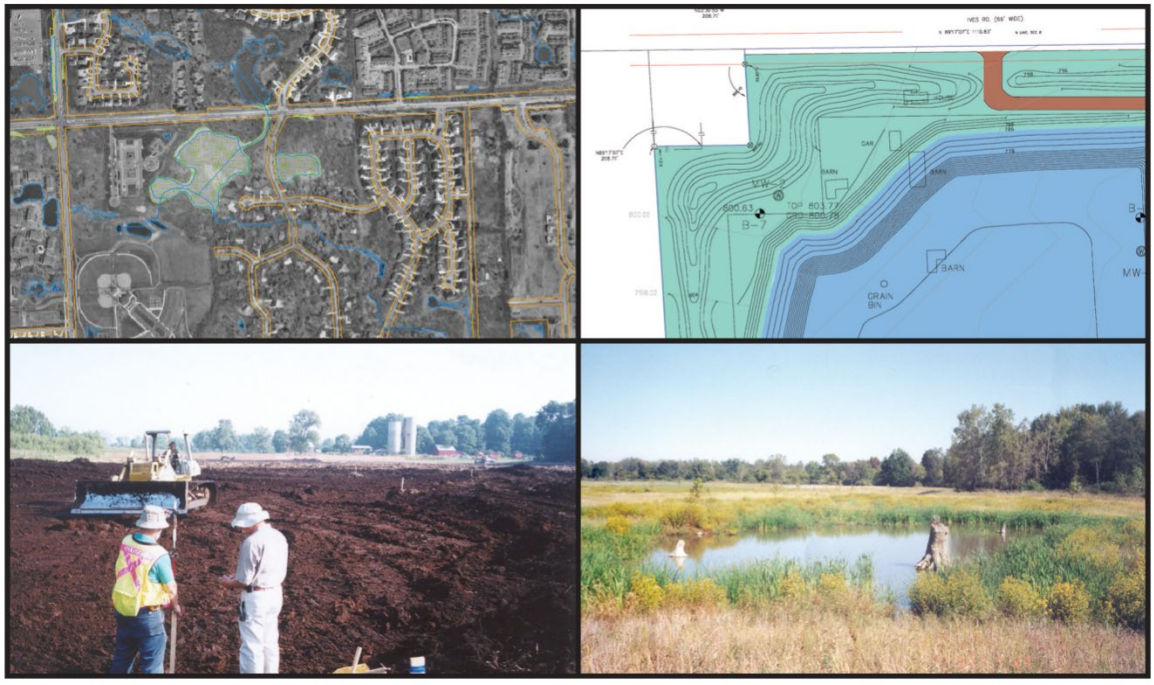
Groundwater Investigation Report

RTRR Property
18251 West Jefferson
Riverview, Michigan

Riverview-Trenton Railroad Company

April 12, 2021

ASTI ENVIRONMENTAL



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1. INTRODUCTION

In accordance with the Corrective Action Consent Order ("CACO") dated November 1, 2018 between the Riverview-Trenton Rail Road Company ("RTRR") and the Michigan Department of Environment, Great Lakes, and Energy ("EGLE"), ASTI Environmental ("ASTI") conducted a groundwater investigation at the property located at 18251 West Jefferson Avenue in the City of Riverview, Wayne County, Michigan ("Subject Property"). The portion of the Subject Property which lies south of Sibley Road, is located in the City of Trenton, Michigan. The 75.8-acre Subject Property lies west of the Trenton Channel, south of the Grosse Ile Toll Bridge and Monguagon Creek, east of railroad tracks, West Jefferson Avenue, and the Sibley Quarry, and north of the Former McLouth Steel Facility. Figure 1 provides a Site Location Map and Figure 2 provides a Site Features Map for the Subject Property.

The Subject Property is surrounded by a fence on the north, west, and south. The Subject Property remains unused and no structures exist. Overhead power lines are present, but power has been disconnected. The only known underground utility on the Subject Property is the regional storm drain which runs from Sibley Avenue, east below the Subject Property and daylights at the Trenton Channel. The Subject Property is unpaved except for a parking lot (approximately 0.4 acres) on the northern portion and asphalt millings comprise roadways through the Subject Property.

The investigation was completed in accordance with the Statement of Work included as Attachment A of the CACO for the Subject Property and with the Work Plan – Groundwater Investigation prepared by ASTI dated June 28, 2019 ("Work Plan").

The CACO Statement of Work for the groundwater investigation included the following tasks:

1. An evaluation of groundwater flow direction and hydrogeologic conductivity across the Subject Property,
2. An evaluation of groundwater impacts beneath the Subject Property, including an assessment of the nature of any off-site sources and an assessment of the nature and extent of groundwater impacts at the Subject Property, and
3. A determination of groundwater flow (including volume and contaminant composition) from the Subject Property to the Detroit River and Monguagon Creek.

EGLE provided approval of the Work Plan in a letter dated July 29, 2019.

2. BACKGROUND

2.1. Site History

The Subject Property originally consisted of wetland and open water with some uplands in the northwestern portion of the property. The Monguagon Creek formerly bisected the property; flowing north to south and emptied into the Trenton Channel of the Detroit River at about Sibley Road. By 1952, much of the Subject Property had been filled to the current bank of the Trenton Channel but open water remained in the original Monguagon Creek Channel. By 1954, the mouth of the Monguagon Creek had been enlarged for docking and at least five above ground storage tanks ("ASTs") were located to the north of the mouth (on the Subject Property). The ASTs were associated with a former bulk oil storage facility located on the Subject Property. By 1964, the original Monguagon Creek channel had been filled and the creek was redirected along the northern extent of the Subject Property and no open water

remained on the Subject Property[1]. Figure 2 - Site Features Map shows the locations of these features.

The McLouth Steel Company ("McLouth Steel") operated a steel manufacturing facility on the property south of the Subject Property and acquired the Subject Property between 1956 and 1961. McLouth Steel used the Subject Property for storage of raw materials, waste, and product to support steel production between the time they acquired the property until about 1975. A large slag processing operation operated by E.C. Levy Company was also located on the Subject Property. After about 1975, production decreased at the McLouth Facility and McLouth Steel ceased operations in April of 1996 after filing for Chapter 11 bankruptcy protection in September of 1995. Hamlin Holdings, Inc. acquired the Subject Property in July of 1996. The Detroit Steel Company ("DSC") obtained title for the Subject Property in August of 1996 and used it for storage and conducted removal activities. DSC resumed pickling of strip steel at the McLouth Facility in July 1998, but those operations closed in 2005. On June 2, 2000, Crown Enterprises purchased the Subject Property and used it for container storage. Crown Enterprises conveyed the property to RTRR in November of 2000. All structures have been removed from the Subject Property and only two concrete pads remain.

2.2. Waste Management Units

In connection with a Consent Order issued by the Michigan Department of Environmental Quality ("MDEQ", now EGLE) to DSC in 1999, MDEQ identified Waste Management Units ("WMU") on the Subject Property. A WMU was defined as "any discernible unit … at which a Contaminant has been or may have been placed at any time irrespective of whether or not the unit was intended for managing waste, or any area at a facility subject to MCL 324.11115(a) at which a Contaminant has been routinely or systematically released". The following five WMUs were identified on the Subject Property, as illustrated on Figure 2.

WMU-26 – Former North Debris Piles

WMU-26 was an approximately 20-acre area located in the central portion of the Subject Property that McLouth Steel used to accumulate various debris from its steel-making activities for reclamation. Based on historical documents, materials placed in the debris piles may have included, but not limited to, refractory material, slag, air pollution control solids (from bag houses), basic oxygen furnace ("BOF") scrubber sludge, scale pit sludges, lime handling dust, and air pollution dusts and sludges.

Waste streams designated for reclamation were not segregated, but randomly mixed in the former piles. Reclaimed steel-containing materials were recycled in the steel-making process and processed debris residuals were transferred to new piles in the same area or directly into trucks for transfer to the landfill.

DSC began processing the debris for recovery of recyclable steel scrap in June of 1997[2]. In July of 2000, DSC began transporting the remaining debris pile material to the Countywide Landfill for disposal. Removal activities continued into late 2002. As a result, no visibly identifiable pile remains.

[1] North Area Characterization Plan, Revised, ESC, November 2, 2000
[2] Debris Pile Characterization Plan, Techna Corporation, June 8, 1998

WMU-27 – Former Equipment Storage Yard
WMU-27 was a fenced area of approximately 1.2 acres on the northern portion of the Subject Property that was used for secure storage of valuable surplus electrical and mechanical equipment. The area is identified as a WMU because it may have been used to store surplus transformers before construction of the Toxic Substance Control Act ("TSCA") Storage Building in 1980. A small (approximately 1,000 square feet) building was located in the northwest corner of the storage yard. The building was not known to have been used for equipment storage; therefore, it is not considered part of the WMU[3]. The primary equipment stored in this area was blast furnace equipment. The chain-link fence around the former Equipment Storage Yard has been removed.

In the third quarter of 2001, DSC excavated and loaded approximately 10 cubic yards of soil impacted with polychlorinated biphenyls ("PCBs") from the WMU-27 area. The soil was removed from the site and disposed as non-hazardous waste. Soil verification samples, collected after soil removal, indicated that the impacted soil had been removed.

WMU-29 – Former TSCA Waste Storage Building
WMU-29 was a concrete block building constructed around 1980 which measured approximately 46 feet ("ft") by 20 ft. The building was used to store containers of PCB transformers and materials in compliance with TSCA regulations. The sealed concrete floor was constructed with secondary containment curbs that served as footings for the block walls. The building was demolished in late 2000 or early 2001 and only the concrete pad and secondary containment curbs remain.

WMU-30 - Former Electronic Arc Furnace Dust Pile
McLouth Steel used both BOF and electronic arc furnaces ("EAF") for steel production. The waste emission control dust generated from the EAF air pollution control systems was designated as a listed hazardous waste (K061) by RCRA. Sludge was accumulated in a concrete sump and transferred to the interim status EAF Dust Pile storage area located in the western portion of the Subject Property, across from Sibley Road. WMU-30 was a roughly 25,000 square ft, triangular-shaped area with an earthen berm.

Part B of McLouth's RCRA storage permit application was called in by the United States Environmental Protection Agency ("USEPA") in 1984. McLouth made various submissions, resulting in a final RCRA/Act 64 permit application dated February 27, 1988. After rejection of that permit, McLouth decided to close the EAF Dust Pile and accumulate EAF dust for no longer than 90 days[4].

McLouth operated WMU-30 continuously until early 1989, when new concrete accumulation tanks (WMU-31) were constructed and placed into use. Final removal of waste took place in 1991. Approximately 980 tons of EAF dust were transported to Horsehead Resource Development Company in Palmerton, Pennsylvania. As a result, no visibly identifiable pile remains.

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[3] Corrective Measures Work Plan – Equipment Storage Yard (WMU-27), TSCA Storage Yard (WMU-29), ESC, July 27, 2000
[4] Final Closure Report and Certification – Interim Status Hazardous Waste Storage Unit, Techna Corporation, March 31, 1998

WMU-31 - Former EAF Emission Control Sludge/Dust Storage Tanks
The EAF Emission Control Sludge/Dust Storage Tanks were reinforced concrete tanks used to accumulate EAF air pollution control sludge and baghouse dust. Two tanks were used to store the material for less than 90 days before shipment off-site for disposal or reclamation at RCRA permitted hazardous waste facility as K061 waste. The tanks and concrete secondary containment structure were constructed in late 1988 to early 1989 and were used until steel-making operations ceased. No releases to the interstitial space or surrounding ground were reported. McLouth reportedly removed all wastes and cleaned the unit in 1996, after EAF operations ceased. After removal of the tanks, the cavity was backfilled to grade and the concrete pad remains in place.

2.3. Areas of Concern

Under the same Consent Order, MDEQ identified Areas of Concern ("AOC"). AOCs were defined as “any area, place, or property where a release or threat of release, within the meaning of Sections 20101(bb) and 20101(ii) of Part 201 of the NREPA, of a hazardous substance in excess of the concentrations which satisfy the requirements of Section 20101 a(1)(a) or (17) or the cleanup criteria for unrestricted residential use under Part 213 of the NREPA has occurred”, that may require additional investigation to determine if these locations were a source of contamination that require action to eliminate contaminants. Five AOCs were identified on the Subject Property, as illustrated in Figure 2. The AOCs on the Subject Property were not identified as requiring further action at that time. The five AOCs are described below.

Former Coke Storage Area
The Former Coke Storage Area was located in the northwestern portion of the Subject Property. The area was used to store piles of coke used in the blast furnace.

Former Monguagon Creek Channel
Prior to 1964, the Monguagon Creek flowed south through the Subject Property from the northern portion of the Subject Property. The creek bed was located west of the Former Oil Terminal (Figure 2). South of the Former Oil Terminal, the creek turned east and emptied into the Trenton Channel. After 1964, the Monguagon Creek bed on the Subject Property was filled and the creek was rerouted to its present-day channel (Figure 2).

Possible Fill Area
The Possible Fill Area was depicted in the 1999 Consent Order in the northern portion of the Subject Property, east of WMU-29 (Figure 2). The area was reportedly filled prior to McLouth’s occupation of the Subject Property. The area appears to be located in the former wetlands.

Former Oil Terminal
The Former Oil Terminal was located in the central portion of the Subject Property. The Former Oil Terminal included five above ground storage tanks (“ASTs”) and was removed from the Subject Property by 1964.

Former Slag Processing Plant – North
The Former Slag Processing Plant – North was located in the southern portion of the Subject Property. This AOC was reportedly a process area operated by the E.C. Levy Company to reclaim and store slag product for later sale.

3. SITE GEOLOGY AND HYDROGEOLOGY

The Subject Property is in the Eastern Lowlands Physiographic Region of Michigan. This region is located near the coast in the southeastern part of Michigan and extends north to the tip of the Lower Peninsula. The lowlands were deposited under large glacial lakes and rose when the lakes lowered. This region is defined by its flat topography and poorly drained soils[5].

The Subject Property is underlain by the Dundee Limestone formation which overlies the Detroit River Group[6]. The Middle Devonian Dundee Limestone underlies most of the Southern Peninsula and averages a thickness of approximately 100 ft in the southeastern portion of Michigan's Southern Peninsula. The Dundee Limestone is a gray to buff cherty, crystalline limestone of high purity which was formerly mined at the Sibley Quarry located south of Sibley Road and approximately 3,600 ft west of the Subject Property. Bedrock was encountered in four soil borings (MW-104, MW-108, MW-109, and MW-110) during the groundwater investigation at elevations between approximately 535.5 ft above mean sea level ("AMSL") and 588 ft AMSL. Bedrock was encountered at a higher elevation in borings in the southern portion of the Subject Property. Limestone was visually confirmed at two of the four locations (MW-104 and MW-110) during drilling. Bedrock cuttings were not returned in the other two borings and the determination of bedrock was based on the driller's opinion due to change in subsurface characteristics.

The confined deep aquifer lies above the bedrock and below the basial clay unit. The deep aquifer which, consists of clayey sand and gravel, was not present at each location during the groundwater investigation. Two groundwater monitoring wells (MW-102D and MW-107D) were installed into the deep aquifer during the groundwater investigation. Groundwater elevations in the deep aquifer were lower than those in the shallow aquifer. Based on the presence and thickness of the clay unit and groundwater elevations, the deep aquifer does not appear to be hydraulically connected to the shallow aquifer.

A clay layer overlies the deep aquifer (where present) beneath the Subject Property and the thickness of the clay layer increases toward the northern portion of the Subject Property based on lithology encountered during the groundwater investigation. The clay layer was thinner in areas which were formerly open water; however, based on this investigation, the clay layer appears to be present below the entirety of the Subject Property and the top of the clay layer was encountered at elevations between 551 ft AMSL and 581 ft AMSL. The lowest elevation of the top of the clay layer was encountered in a boring (MW-100) drilled into the former Monguagon Creek bed in the northern portion of the Subject Property.

Regional groundwater flow is assumed to be controlled by the Detroit River. The Eastern Lowlands Physiographic Region is characterized by deposits of glacio-lacustrine clay and silt deposits. These deposits are not a significant source of groundwater due to their low permeability. The Dundee Limestone can yield significant quantities of groundwater; however, high mineral concentrations limit consumptive use.

Based on groundwater elevation data collected during the investigation, groundwater flow in the shallow aquifer beneath the Subject Property is toward the Trenton Channel in the

[5] http://geo.msu.edu/extra/geogmich/phy-regions.html
[6] https://www.deq.state.mi.us/GeoWebFace/

southern portion of the Subject Property and toward the Monguagon Creek in the northern portion of the Subject Property. Based on lithology recorded during well installation, the shallow aquifer is underlain by the basal clay confining unit and groundwater in the shallow aquifer is within fill material. The Subject Property consisted of wetlands prior to about 1952.

4. GROUNDWATER INVESTIGATION

ASTI conducted the groundwater investigation in accordance with the CACO and Work Plan. Investigation activities consisted of an inspection of existing wells, groundwater monitoring well installation, well development, groundwater level gauging, four consecutive quarters of groundwater sample collection, and aquifer testing (slug testing).

4.1. Assessment of Existing Monitoring Wells

On September 4, 2019, ASTI mobilized to the Subject Property to assess the condition of existing groundwater monitoring wells. The objective was to determine which of the previously installed monitoring wells were still present, could be located and accessed, and to assess the well condition based on visible observation and depth sounding. ASTI collected total depth measurements and depth to water measurements from the wells which could be accessed. Total depth measurements were compared to available well logs.

In the Work Plan, ASTI proposed installation of shallow and deep monitoring wells in the vicinity of existing well TMW-27. However, based on the results of the assessment, ASTI determined that existing well TMW-27 could be used in the groundwater investigation in place of the proposed shallow well in that location. No additional existing wells were determined to be acceptable for further use during this investigation.

4.2. Groundwater Monitoring Well Installation

ASTI subcontracted licensed driller, Cascade Environmental ("Cascade") to install the wells proposed in the Work Plan. Between the dates of October 14 and October 22, 2019, ASTI provided oversight and direction while Cascade installed 15 groundwater monitoring wells at 11 locations on the Subject Property. Four well locations contained nested well pairs. Prior to drilling, ASTI contacted Michigan's MISS DIG system to provide a location of underground utilities.

Sonic drilling was utilized to install the 15 groundwater monitoring wells between depths of 10 ft below ground surface ("bgs") and 55 ft bgs. Well locations were designated as MW-100 through MW-110 and nested well pairs were installed at locations MW-100, MW-107, MW-109, and MW-110. Monitoring wells were installed at the approximate locations shown in the Work Plan, and as illustrated on Figure 3. Designations of relative depth were incorporated with the well identification number for nested well pairs (i.e. MW-100s and MW-100i screen the upper portion of the shallow aquifer and the lower portion of the shallow aquifer, respectively). Wells with the "D" in the identification were intended to be installed into the deep aquifer based on observations during well installation. ASTI later determined that wells MW-109D and MW-110D were installed into the lower portion of the shallow aquifer (based on groundwater elevations, lithology, and chemical profiles).

An ASTI field scientist logged soil cuttings and scanned the soil for the presence of volatile organic compounds ("VOCs") with the use of a photoionization detector ("PID"). The ASTI scientist logged the soil cuttings and recorded the PID readings in a field notebook or on designated forms. As described in the Work Plan, well depths were proposed to screen the

upper portion of the shallow aquifer, the lower portion of the shallow aquifer, or the second water bearing zone ("deep aquifer"). The ASTI field scientist used information collected during drilling (i.e. lithology, saturated zones, and/or depth to water) to determine the screen intervals. The soil boring and well construction logs are included as Attachment A.

Each well consists of two-inch diameter polyvinyl chloride ("PVC") riser with factory-slotted PVC well screen. The screen lengths varied between 5 ft and 20 ft. A sand filter pack was installed in the annulus around each screen to approximately two ft above the top of the screen. Bentonite chips were placed above the filter pack to near ground surface or between screen intervals in the nested well pairs. Each well was finished with a steel stick up protective cover and a concrete pad was installed around the protective cover with the exception of MW-106. A loss of sand occurred while placing the filter pack at shallow well MW-106. Borehole collapse at this location occurred later and provided a natural filter pack. Figure 3 provides a Site Features Map which shows the location of each groundwater monitoring well. Attachment A provides the soil boring logs and well completion diagrams for the new monitoring wells and existing well TMW-27, which, was installed by others during a previous investigation. Table 1 – Summary of Groundwater Monitoring Wells, provides a summary of well depths, top of PVC casing elevations, screen lengths, and surveyed locations. After installation, ASTI developed each of the newly installed wells and TMW-27 by over-pumping each well until the purge water appeared free of sediment.

The screen length varied based on the total well depth and the thickness of the saturated zone. Wells installed into the deep aquifer (wells designated with "D" in the well identification) were completed with five ft of well screen.

In the Work Plan, locations MW-101, MW-103, MW-105, and MW-106 were proposed to consist of a nested well pair to screen both the upper and lower portion of the shallow aquifer. Based on observations of the shallow saturated zone during drilling, one well was installed in each location with a screen length to intersect the water table and extending to the bottom of the shallow aquifer (Attachment A).

Monitoring well MW-110D was intended to screen the deep aquifer. During drilling the clay layer between the depth of 18 ft bgs and 19 ft bgs represented the basal clay unit. A five foot screen was installed below the clay layer. After a review of the well completion logs ASTI determined that the basal clay unit is located directly above the bedrock and the upper clay layer is likely a lens. The clay confining layer found in other portions of the Subject Property during this investigation was thicker than 1 ft. Groundwater elevation data and groundwater analytical concentrations supported the evidence that the screen for MW-110D is set in the shallow aquifer. Wells MW-102D and MW-107D screen the confined deep aquifer.

After installation, a licensed land surveyor provided a well elevation and location survey. Meridian Land Surveying of Flint, Michigan provided the top of PVC casing elevation and location for each of the new wells and existing well TMW-27, and a surface water elevation gauging location at the sea wall along the Trenton Channel (TC-1 [Figure 3]). The top of PVC casings served as the measuring point for depth to groundwater measurements and the top of casing elevations were measured to the nearest 0.01 ft. The well locations were provided using the Michigan State Plane South Coordinates. Table 1 provides a summary of the measuring point elevations and the well locations and Figure 3 depicts the location of the wells.

4.3. Groundwater Sampling

Once well installation and development were complete, ASTI conducted four consecutive quarterly groundwater gauging and sampling events, beginning in the fourth quarter of 2019, and ending in the third quarter of 2020. Groundwater sampling was conducted in accordance with the CACO and the Work Plan.

4.3.1. Depth to Groundwater Measurements

Prior to purging for groundwater sample collection, ASTI collected depth to water measurements at each well to be sampled. Groundwater gauging events took place before each quarterly groundwater sampling event on December 12, 2019, March 18, 2020, May 27, 2020, and July 29, 2020. Depth to water measurements collected during the first and third groundwater sampling events (December 10, 2019 and May 27, 2020, respectively) were collected as depth from ground surface by collecting the depth to water from the top of the steel casing and subtracting the height of the steel casing. Those measurements are not considered to be precise enough to determine the groundwater elevation. As a result, ASTI conducted an additional depth to groundwater gauging event on July 7, 2020. Groundwater elevations were calculated by subtracting the depth to groundwater from the measuring point (top of PVC casing) elevation. Table 2 – Groundwater Elevation Summary, provides a summary of the depth to water measurements and groundwater elevations. Groundwater elevation contour maps for the gauging events conducted on March 18, 2020, July 7, 2020, and July 29, 2020 are provided as Figure 3, Figure 4, and Figure 5, respectively.

Groundwater was not present in MW-109s during the gauging events. During well installation, the upper sand interval was believed to be the top of the shallow aquifer. Based on a review of the groundwater elevations in the shallow aquifer and the MW-109s screen elevation, the bottom of the screen was set above the shallow aquifer. ASTI determined that MW-109D was not set into the deeper aquifer but in the shallow aquifer because the deep aquifer was not present at the MW-109 location (Attachment A).

4.3.2. Groundwater Sample Collection

After collecting depth to water measurements at each of the wells to be sampled, ASTI began purging the wells for sample collection. Purging took place with the use of a peristaltic pump at each well; however, due to the depth to water at MW-102D, a bladder pump was used to purge and collect the groundwater sample at this location. Each well was purged at a flow rate low enough to eliminate or minimize groundwater drawdown to ensure that formation water was being collected. ASTI collected water quality readings during well purging on five-minute intervals. The water quality readings consisted of pH, turbidity, temperature, specific conductance, dissolved oxygen, and oxidation-reduction potential. After the water quality readings stabilized for three consecutive readings, ASTI collected groundwater samples into jars provided by the laboratory, appropriate for the specified analysis.

Each groundwater sample was given a unique sample identification consisting of the well name and a six-digit date. For example, the sample collected from MW-103 on December 12, 2019 was identified as “MW-103-121219”. Groundwater samples collected from TMW-27 were mistakenly labeled as “TMW-26” during each of the four quarterly sampling events, but ASTI confirmed that each sample labeled with “TMW-26” was collected from well TMW-27 (Figure 3), and no samples were collected from TMW-26 during this investigation. ASTI collected one duplicate sample during each groundwater sampling event. The duplicate samples were labeled as “DUPLICATE” or “DUP” without the well identification and the date

of collection. A trip blank was provided by the laboratory for each set of samples and resided in the sample cooler during each sampling event and during transportation.

Upon collection, ASTI placed the samples on ice and the samples were kept cold until delivery to Fibertec Environmental Service ("Fibertec") in Holt, Michigan using standard chain of custody procedures. In accordance with the CACO and the Work Plan, the groundwater samples (including duplicate and trip blank samples) were analyzed for the following parameters:

Analysis	Analytical Method
VOCs	5035 and 8260
Semi-volatile Organic Compounds ("SVOCs")	8270
Polychlorinated Biphenyls ("PCBs")	8082A
Metals(1)	6020
Total Mercury	7470
Cyanide, Free	9016
Chloride	9253
Ammonia	350.1
pH	9040B
Total Dissolved Solids	160.1

(1) Arsenic, barium, total chromium, copper, lead, manganese, nickel, selenium, silver, vanadium, and zinc.

Method detection limits for mercury were greater than the Generic Nonresidential Cleanup Criteria ("GNRCC") under Part 201 of Michigan's *Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended* ("Part 201") Groundwater to Surface Water Interface Criteria ("GSI"); therefore, the samples collected in the third and fourth sampling events (May 2020 and June 2020, respectively) were additionally analyzed for low-level mercury analysis by USEPA Method 1631E.

Sufficient quantities of groundwater were not present in MW-109s for sample collection during any of the four sampling events. Therefore, groundwater samples were not collected from MW-109s during this investigation.

4.4. Aquifer Testing

On August 4, 2020, ASTI conducted aquifer testing via slug testing at the Subject Property. ASTI chose a subset of wells which represent the shallow aquifer across the Subject Property. ASTI conducted slug tests at wells MW-100s, MW-100i, MW-101, MW-104, MW-107s, MW-108, MW-109D, and MW-110D; however, upon review of the data, the slug tests completed for MW-107, MW-108, and MW-110D did not produce reliable results due to likely movement of the level troll during slug insertion or removal. ASTI believes that the slug tests in this evaluation provide an accurate representation of the shallow aquifer at the Subject Property.

Prior to conducting a slug test, ASTI inserted a water level data logger into the test well and recorded the static depth to water with an electronic sounding probe. ASTI then completed slug testing by rapidly inserting a solid slug of a known volume into the well and observing water level data until it returned to within at least 90 percent of the static level. The test was repeated by removing the slug from the well and observing water levels. Slug tests were repeated when water levels recovered quickly and when field results were of uncertain quality

and hydraulic conductivity values for multiple tests in a single well were averaged ("representative value") to determine the representative hydraulic conductivity for that well.

The calculated hydraulic conductivity values resulting from the slug tests completed in the shallow aquifer on August 4, 2020 ranged from 0.093 ft per day ("ft/day") to 18 ft/day. The geometric mean of the representative values for each well is approximately 2.1 ft/day. This value is consistent with silty sand or fine sand which was logged in the screen interval of the logs for the tested wells. Table 3 – Summary or Slug Test Data, provides a summary of the hydraulic conductivity values calculated from the August 4, 2020 slug testing event. Slug test data files are included as Attachment B.

4.5. Groundwater Analytical Results

The groundwater laboratory analytical results for the quarterly sampling events were compared to the Part 201 GNRCC including, Nonresidential Drinking Water Criteria ("DW"), the GSI, and the Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria ("GVIAI"). Laboratory analytical results indicated groundwater concentrations exceeded the GNRCC for DW and GSI for several parameters. Table 4 provides a summary of the groundwater analytical data and Attachment C includes the laboratory analytical reports and chain-of-custody forms for each sampling event conducted during this investigation.

Metals

Arsenic was detected at concentrations exceeding the GNRCC for DW in one or more samples collected from wells MW-101s, MW-101i, MW-104, and MW-105. Lead was detected at concentrations exceeding the GNRCC for DW in one or more samples collected from wells MW-101i, MW-101, MW-102D, MW-103, MW-105, and MW-106, MW-108, and MW-110D. Manganese was detected at concentrations exceeding the GNRCC for DW in one or more samples collected from wells MW-100i, MW-101, MW-102D, MW-103, MW-107D, and MW-109D.

Arsenic was detected at concentrations exceeding the GNRCC for GSI in one or more samples collected from wells MW-101s, MW-101i, MW-104, and MW-105. Total chromium was detected at concentrations exceeding the GNRCC for GSI in one or more samples collected from MW-101i, MW-106, MW-108, MW-110s, MW-110D, and TMW-27. Selenium was detected at concentrations exceeding the GNRCC for GSI on one occasion from MW-100s and MW-100i. Silver was detected at concentrations exceeding the GNRCC for GSI on one occasion from MW-101 and MW-104. Vanadium was detected on one occasion at a concentration exceeding the GNRCC for GSI in MW-105. Figure 7 depicts the groundwater sample locations and concentrations where metals exceeded the GNRCC.

Mercury

Mercury was not detected at concentrations exceeding the laboratory reporting limit during the first two quarterly sampling events; however, the laboratory detection limit was greater than the GNRCC for GSI. Therefore, low-level mercury analysis was conducted in addition to total mercury analysis for samples collected during the final two sampling events. Mercury was detected via low-level analysis and/or total mercury analysis at concentrations exceeding the GNRCC for GSI in one or more samples collected from each well during the final two sampling events with the exception of wells MW-106 and MW-107D.

Mercury concentrations in the groundwater samples collected during this investigation did not exceed the GVIAIC.

Semi-volatile Organic Compounds

The SVOCs aniline, carbazole, dibenzofuran, 2,4-dichlorophenol, 2,4-dimethylphenol, fluoranthene, 3- and 4-methylphenol, and phenanthrene were detected in one or more groundwater samples at concentrations exceeding the GNRCC for GSI. The compounds aniline, carbazole, and dibenzofuran were each detected on one occasion at concentrations exceeding criteria; each from samples collected from MW-100s or MW-100i. The SVOC 2,4-dimethylphenol was only detected on two occasions at concentrations exceeding criteria; each from samples collected at MW-104. Figure 8 depicts the locations and groundwater concentrations where SVOCs exceeded the GNRCC.

SVOC concentrations in the groundwater samples collected during this investigation did not exceed the GVIAIC.

Volatile Organic Compounds

The compounds benzene and vinyl chloride were detected in one or more samples collected from MW-100s and MW-100i at concentrations which exceeded the GNRCC for DW. Dibromochloropropane was detected on one occasion from MW-100i at a concentration exceeding the GNRCC for DW.

Naphthalene was detected at concentrations exceeding the GNRCC for GSI on two or more occasions from wells MW-100s, MW-100i, MW-103, and MW-107s. 1,2,4-trimethylbenzene was detected at concentrations exceeding the GNRCC for GSI in each sample collected from MW-101. Vinyl chloride was detected at concentrations exceeding the GNRCC for GSI in three or more samples collected from MW-100s and MW-100i. Total xylenes were detected on one occasion at a concentration exceeding the GNRCC for GSI in well MW-100s. VOCs were not detected at concentrations exceeding either criteria in samples collected from wells MW-102D, MW-104, MW-105, MW-106, MW-107D, MW-108, MW-109D, MW-110s, MW-110D, or TMW-27. Figure 8 depicts the locations and concentrations where VOCs exceeded the GNRCC.

VOC concentrations in the groundwater samples collected during this investigation did not exceed the GNRCC for GVIAI.

PCBs

PCBs were not detected above the laboratory reporting limit in any groundwater sample collected during this investigation.

Ammonia, Chloride, Total Dissolved Solids, and pH

Ammonia was detected at concentrations in exceedance of the GNRCC for DW in one or more samples collected from MW-100s, MW-100i, MW-104, and MW-107s. Chloride was detected at concentrations in exceedance of the GNRCC for DW in one sample collected from MW-100s (MW-100s-052720) and in three of the four samples collected from MW-104 and at concentrations in exceedance of the GNRCC for GSI in each of the four samples collected form MW-100s, MW-100i, MW-101, MW-104, and on one occasion in MW-110s.

Total dissolved solids were detected above the GNRCC for DW and the GSI in one or more samples collected from each well sampled with the exception of MW-102D and MW-107D. Laboratory pH readings indicated elevated readings (greater than 8.5 standard units [“S.U.”]) in each groundwater sample collected except for MW-102D and MW-107D. Each sample collected from MW-102D contained pH readings within the acceptable range of 6.5 S.U. to

8.5 S.U. Only one of the four samples collected from MW-107D (MW-107D-121219) contained an elevated pH reading of 8.54 S.U. Figure 7 includes the locations and concentrations of ammonia, chloride, and total dissolved solids which exceeded GNRCC.

Ammonia concentrations in the groundwater samples collected during this investigation did not exceed the GVIAIC.

5. GROUNDWATER FLOW FROM THE SUBJECT PROPERTY

ASTI calculated the groundwater flow from the Subject Property to the Trenton Channel and the Monguagon Creek. A 270-foot long steel sheet pile wall is located along the bank of the Trenton Channel in the northeastern portion of the Subject Property (Figure 2). The sheet pile wall creates a boundary which prevents groundwater flow from the Subject Property to the Trenton Channel along the wall; thus, diverting flow to the north and south of the sheet pile wall (Figures 4, 5, and 6).

Groundwater flow to the north of the sheet pile wall is designated the Northern Flow Zone and groundwater flow to the south of the sheet pile wall is designated the Southern Flow Zone. ASTI calculated groundwater flow to the Monguagon Creek ("Northern Flow Zone") and the Trenton Channel ("Southern Flow Zone") separately. ASTI calculated the groundwater flow from the Subject Property using the following equation:

$$Q = KAi$$

Where: Q = groundwater flow (ft^3/day)
K = hydraulic conductivity (ft/day),
A = area of cross-sectional flow (height of saturated zone * length of groundwater/surface water interface) (ft^2)
i = hydraulic gradient (unitless)

The height of the saturated zone represents the elevation of the top of the confining layer (clay layer) subtracted from the average groundwater elevation. The area of cross-sectional flow represents a vertical plane through which groundwater flows at the groundwater/surface water interface ("GSI"). The length of the GSI for the Northern Flow Zone was measured from the point where the Monguagon Creek enters the Subject Property to the northern end of the sheet-pile wall. The length of the Southern Flow Zone was measured from the southern end of the sheet-pile wall to the point where the southern property border meets the Trenton Channel. The hydraulic gradient is the difference in groundwater elevation between two wells in the groundwater flow path divided by the distance between the two wells.

5.1. Groundwater Flow to the Monguagon Creek (Northern Flow Zone)

ASTI calculated the groundwater flow in the Northern Flow Zone using the hydraulic gradient between wells TMW-27 and MW-100s/i (MW-100s and MW-100i are both screened in the shallow aquifer). The hydraulic gradient for each groundwater elevation monitoring event was 0.01. As a conservative measure, ASTI used the maximum hydraulic conductivity calculated from slug tests conducted in the Northern Flow Zone, which was 1.8 ft/day (hydraulic conductivity calculated for MW-100s). The length of cross-sectional flow is 1,810 ft and an average saturated height of 24.3 ft (average saturated height in MW-100s and MW-100i) for a calculated area of 43,983 ft^2. The calculated groundwater flow from the Northern Flow Zone to the adjacent stream was calculated to be approximately 790 cubic ft per day ("ft^3/day") or

5,920 gallons per day ("gpd"). Assuming the GSI length of 1,810 ft, the groundwater flow is approximately 3.3 gpd/ft in the Northern Flow Zone. Table 5 provides a summary of the groundwater flow calculations.

5.2. Groundwater Flow to the Trenton Channel (Southern Flow Zone)

ASTI calculated the groundwater flow in the Southern Flow Zone using the hydraulic gradient between wells MW-106 and MW-107s. The maximum hydraulic gradient was calculated to be 0.0005. As a conservative measure, ASTI used the maximum, per-well average hydraulic conductivity calculated from slug tests conducted at wells located in the Southern Flow Zone (MW-101, MW-104, and MW-109D). The hydraulic conductivity value used was 12.8 ft/day (average value for MW-109D). The length of cross-sectional flow is 3,230 ft and an average saturated height of 12.7 ft (average saturated height in wells MW-101, MW-107s, MW-108, MW-110s, and MW-110D) for a calculated area of 41,021 ft^2. The calculated groundwater flow from the Southern Flow Zone to the Trenton Channel was calculated to be approximately 260 ft^3/day or 1,960 gpd. Given a GSI length of 3,230 ft, the groundwater flow is approximately 0.61 gpd/ft in the Southern Flow Zone. Table 5 provides a summary of the groundwater flow calculations.

6. CONTAMINANT FLOW TO THE TRENTON CHANNEL

ASTI calculated the mass of contaminants flowing from groundwater beneath the Subject Property in the Northern and Southern Flow Zones. ASTI used the calculated groundwater flow for each zone and a representative concentration of each constituent that exceeded the GNRCC for GSI in the GSI monitoring points. The GSI monitoring points are defined in Natural Resources and Environmental Protection Act 451 of 1994 Section 20120e(23)(d) as, *a vertical well installed in the saturated zone as close as practicable to surface water with a screened interval or intervals that are representative of the groundwater venting to the surface water*.

In the Northern Flow Zone, MW-100s and MW-100i represent the GSI monitoring points and in the Southern Flow Zone, MW-101, MW-107s, MW-108, MW-110s, and MW-110D represent the GSI monitoring points (MW-110D is installed in the shallow aquifer). MW-107D is not considered to be a GSI monitoring point because the deep aquifer is not considered to vent directly to surface water.

6.1. Contaminant Flow in the Northern Flow Zone

Based on groundwater flow direction, ASTI determined that monitoring wells TMW-27, MW-102D, MW-100s, and MW-100i are in the Northern Flow Zone. Wells MW-100s and MW-100i represent the GSI monitoring points in the Northern Flow Zone.

ASTI developed representative concentrations for chemicals which exceeded the GNRCC for GSI in the GSI monitoring points using the USEPA ProUCL Software Version 5.1. A 95% UCL could not be calculated from the dataset for the chemicals, total chromium, aniline, carbazole, and dibenzofuran due to only one analytical concentration above the laboratory reporting limit each. As a conservative measure, ASTI used the maximum detected concentration as the representative concentration for these chemicals and the mass is likely an overestimation. The representative concentrations of chemicals which exceeded the GNRCC for GSI are presented in Table 6 and the ProUCL output files are included in Attachment D.

Mixing zone calculations are not included as part of this investigation however, ASTI calculated the approximate mass of contaminants flowing from the Northern Flow Zone to the

Monguagon Creek using the groundwater flow and the representative concentrations. Table 7a provides a summary of the Chemical Mass loading from the Northern Flow Zone presented in grams per day.

6.2. Contaminant Flow in the Southern Flow Zone

Based on groundwater flow direction, ASTI determined that monitoring wells MW-101, MW-103, MW-104, MW-105, MW-106, MW-107s, MW-107D, MW-108, MW-109D, MW-110s, and MW-110D are in the Southern Flow Zone. Wells MW-101, MW-107s, MW-108, MW-110s, and MW-110D represent the GSI monitoring points in the Southern Flow Zone. Well MW-101 was chosen as a conservative measure because it represents the southern-most monitoring point with no monitoring well between it and the Trenton Channel.

Based on groundwater elevations, chemical concentrations, and absence of a significant confining clay layer above the screen, ASTI determined that MW-110D is screened in the shallow aquifer. Therefore, MW-110s and MW-100D are both screened in the shallow aquifer. ASTI calculated representative concentrations for each constituent that exceeded the GNRCC for GSI in the GSI monitoring points. Using the groundwater flow for the Southern Flow Zone, ASTI determined the approximate mass of chemicals flowing from beneath the Subject Property to the Trenton Channel.

ASTI developed representative concentrations for chemicals which exceeded the GNRCC for GSI in the GSI monitoring points using the USEPA ProUCL Software Version 5.1. A 95% UCL could not be calculated from the dataset for the chemicals silver and phenanthrene due to only one concentration above the laboratory reporting limit each. As a conservative measure, ASTI used the maximum detected concentration as the representative concentration for these constituents. Therefore, the mass of those chemicals is likely an overestimation. The representative concentrations of the chemicals which exceeded the GNRCC for GSI are presented in Table 6 and the ProUCL output files for the Southern Flow Zone are included in Attachment D.

Mixing zone calculations are not included as part of this investigation however, ASTI calculated the approximate mass of contaminants flowing from the Southern Flow Zone to the Trenton Channel using the groundwater flow and the representative concentrations. Table 7b provides a summary of the Chemical Mass loading from the Southern Flow Zone presented in grams per day.

7. SITE CONCEPTUAL MODEL

Based on the groundwater investigation conducted by ASTI and previous investigations conducted by others, ASTI developed the following Site Conceptual Model.

The Subject Property is bordered to the north by the Monguagon Creek, to the east by the Trenton Channel of the Detroit River, to the south by the Former McLouth Steel Facility, and to the west by railroad tracks and West Jefferson Avenue. Mixed residential and commercial properties and Sibley Quarry lie west of West Jefferson Avenue and Grosse Ile lies east of the Trenton Channel.

The Subject Property is underlain by fill material above the basial clay unit throughout the Subject Property, which overlies the Dundee Limestone formation. Based on the groundwater monitoring wells installed in 2019, the top of the Dundee Limestone formation lies between approximately 535.5 ft AMSL and 558 ft AMSL. A layer of sand and gravel is present between

the basal clay and bedrock at elevations between approximately 542.5 ft AMSL and 535.5 ft AMSL. Deep wells, MW-102D and MW-107D are screened in that sand and gravel layer. The approximate bottom elevation of the Trenton Channel is above the bottom of the basal clay unit; therefore, the clay unit likely isolates the deeper sand and gravel aquifer from the Trenton Channel. The top of the basal clay unit lies between approximate elevations of 551 ft AMSL and 581 ft AMSL.

Before 1952, the Subject Property consisted mostly of open water and the basal clay unit was most likely located at the bottom of the open water. Fill material was placed on top of the basal clay unit to fill the wetlands. Based on soil boring logs developed during this investigation, the bottom of the fill is below the surface water elevation of the Trenton Channel and the water table is located within the fill layer. Therefore, the shallow aquifer beneath the Subject Property was created by filling in the open water. Most of the fill was placed prior to 1952 and the origin of the fill is unknown. The fill was evident during well installation by the presence of slag, metal shards, portions of suspected railroad ties and spikes, and brick fragments. Until approximately 1967, the Monguagon Creek bisected the Subject Property, flowing north to south, before emptying into the Trenton Channel east of Sibley Avenue. Wells MW-100i/s, MW-103, and MW-106 were installed in the former creek bed.

After acquisition sometime between 1956 and 1961, McLouth Steel used the Subject Property for storage of raw materials, waste, and equipment. The E.C. Levy Company operated a slag processing plant on the Subject Property and slag is present in the fill material. A bulk oil storage facility was located approximately in the center of the Subject Property until sometime before 1964.

Based on groundwater gauging events conducted during this investigation, the water table below the Subject Property lies between elevations of 575 ft AMSL and 580 ft AMSL. The groundwater elevation in the deep aquifer was calculated to be at elevations between 557 ft AMSL and 574 ft AMSL. ASTI later determined that wells designated MW-109D and MW-110D were screened in the shallow aquifer. This determination was made through a review of well completion logs, groundwater elevation data, and laboratory analytical data.

Groundwater flow in the shallow aquifer is northeast toward the Monguagon Creek in the Northern Flow Zone and east toward the Trenton Channel in the Southern Flow Zone. The Northern and Southern Flow Zones are divided by a steel sheet-pile wall, approximately 270 ft long, located along the bank of the Trenton Channel, immediately south of the confluence of the Monguagon Creek and the Trenton Channel. The sheet-pile wall restricts groundwater flow along the wall from the shallow aquifer to the Trenton Channel. The groundwater flow restriction created a lobe of elevated groundwater as shown in the groundwater elevation contour maps near wells MW-104 and MW-105 in Figures 4, 5 and 6.

8. Nature and Extent of Groundwater Impacts

Deep Aquifer

Groundwater analytical data indicate exceedances of one or more metals in each of the 15 wells sampled during the four consecutive quarterly events. Wells screened in the deep aquifer (MW-102D and MW-107D) contained the fewest exceedances of metals. The basal clay unit restricts flow between the shallow and deep aquifers and the deep aquifer is at an elevation below the bottom of the Trenton Channel and therefore, not directly hydraulically connected to the Trenton Channel. Based on the upgradient location of MW-102D and the screen interval below a confining layer, it is unlikely that impacts in MW-102D result from

activities conducted on the Subject Property. VOCs, SVOCs, and PCBs were not detected in the deep wells at concentrations exceeding laboratory reporting limit during this investigation.

Shallow Aquifer
Elevated pH readings were detected during each sampling event from each shallow well sampled, likely due to the presence of slag in the fill material. Samples collected from wells MW-106, MW-108, MW-110s, MW-110D, and TMW-27 did not contain concentrations of VOCs, SVOCs, or PCBs in exceedance of GNRCC. The SVOCs aniline, carbazole, dibenzofuran, and dibromochloropropane and the VOCs fluoranthene, benzene, dibromochloropropane, and vinyl chloride were detected at concentrations exceeding GNRCC only in wells MW-100s and MW-100i. MW-100s and MW-100i are located in the former channel of the Monguagon Creek on the upstream (north) portion of the property In total, SVOCs were detected at concentrations exceeding criteria on 42 occasions; 21 of those exceedances were detected in samples collected from MW-100i and MW-100s. The former stream bed may act as a preferential pathway of migration on to the Subject Property from an offsite source.

1,2,4-trimethylbenzene was detected at concentrations exceeding GNRCC for GSI only in well MW-101 (in each of the four samples collected). MW-101 is located near the southwest corner of the Subject Property near the upgradient (west) property boundary. The GNRCC for GSI exceedances of 1,2,4-trimethylbenzene in MW-101 and not in other wells on the Subject Property, indicates that the source is likely upgradient and off-site.

Wells MW-104 and MW-105 were installed in the shallow aquifer immediately downgradient of WMU-27 and WMU-29, respectively to assess potential impacts from former operations at those WMUs. PCBs are the contaminant of potential concern for WMU-27 and WMU-29. PCBs were not detected in groundwater samples collected from MW-104 or MW-105 at concentrations above the laboratory reporting limit during this investigation. Concentrations of 2,4-dimethylphenol (MW-104) and 3,4-dimethylphenol (MW-104 and MW-105) exceeded the GNRCC for GSI during multiple sampling events.

Given the nature and extent of the constituents detected in groundwater during four quarters of sampling, the impacts are likely a result of offsite sources and/or the material used to fill the former wetlands and Monguagon Creek bed.

9. EXPOSURE PATHWAYS

Groundwater beneath the Subject Property is not used as a source of drinking water. The Monguagon Creek and Trenton Channel are the only downgradient receptors. The shallow aquifer beneath the Subject Property would likely not provide enough water to act as a drinking water source. However, a restrictive covenant can be placed on the deed to prevent installation of wells into the shallow or deep aquifer beneath the Subject Property for consumptive use or irrigation as part of any due care obligations. Therefore, the drinking water is not a relevant exposure pathway for the Subject Property.

The Detroit River is used as a drinking water source. Therefore, the GNRCC for GSI is relevant for the Subject Property. A request for calculation of mixing zone based GSI criteria may be submitted to EGLE if necessary; based on potential remedial options for groundwater beneath the Subject Property.

The Subject Property is currently unoccupied and there are no structures. Therefore, groundwater volatilization to indoor air is not currently a relevant pathway.

10. SUMMARY

ASTI conducted a groundwater investigation at the Subject Property in accordance with the CACO and ASTI's Work Plan. The investigation included installation of 15 groundwater monitoring wells and four consecutive groundwater sampling events conducted at 16 total monitoring wells. Depth to groundwater measurements were used to calculate groundwater elevations in the shallow and deep aquifers and groundwater flow in the shallow aquifer is toward the Monguagon Creek in the Northern Flow Zone and toward the Trenton Channel in the Southern Flow Zone. The Northern and Southern Flow Zones are separated by the steel sheet pile wall south of the confluence of the Monguagon Creek and the Trenton Channel. The results of slug testing in the shallow aquifer indicated that the hydraulic conductivity is approximately 1.8 ft/day in the Northern Flow Zone and approximately 12.8 ft/day in the Southern Flow Zone. These values are typical of silty to fine sand aquifers like the material used to fill the former open water at the Subject Property.

Groundwater analytical samples indicated impacts of dissolved metals and limited VOCs and SVOCs. Elevated pH readings were recorded in each of the wells installed in the shallow aquifer. Laboratory analytical data indicated exceedances of GNRCC for DW and GSIP. Drinking water is not used at the Subject Property and a restrictive covenant can be placed on the deed to restrict future use. The Detroit River is used as a drinking water source. ASTI calculated representative concentrations for chemicals which exceeded the GSIP and used the representative concentrations and groundwater flow to determine the mass of those chemicals flowing to the Monguagon Creek and the Trenton Channel.

11. CONCLUSIONS

Data collected during the groundwater investigation conducted by ASTI in 2019 and 2020 show that groundwater concentrations exceeding the GNRCC for DW and GSIP are likely a result of various sources. Chemical impacts in the MW-100s/i nested well pair are not characteristic of former operations conducted at the Subject Property, and it is likely that these impacts are a result of off-site activities or from the material used to fill in the Monguagon Creek bed. The property east of the northern portion of the Subject Property is a former chemical manufacturing facility that is currently undergoing remediation as a result of soil and groundwater contamination from "organic and inorganic compounds"[7]. Additionally, the former Monguagon Creek bed may act as a preferential flow pathway from an off-site source to the north. Groundwater impacts of 1,2,4-trimethylbenzene detected in MW-101 are likely a result of an off-site, upgradient source given the location of the well.

Concentrations of metals detected in groundwater samples across the Subject Property are likely a result of the slag-containing fill material.

12. RCRA CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or

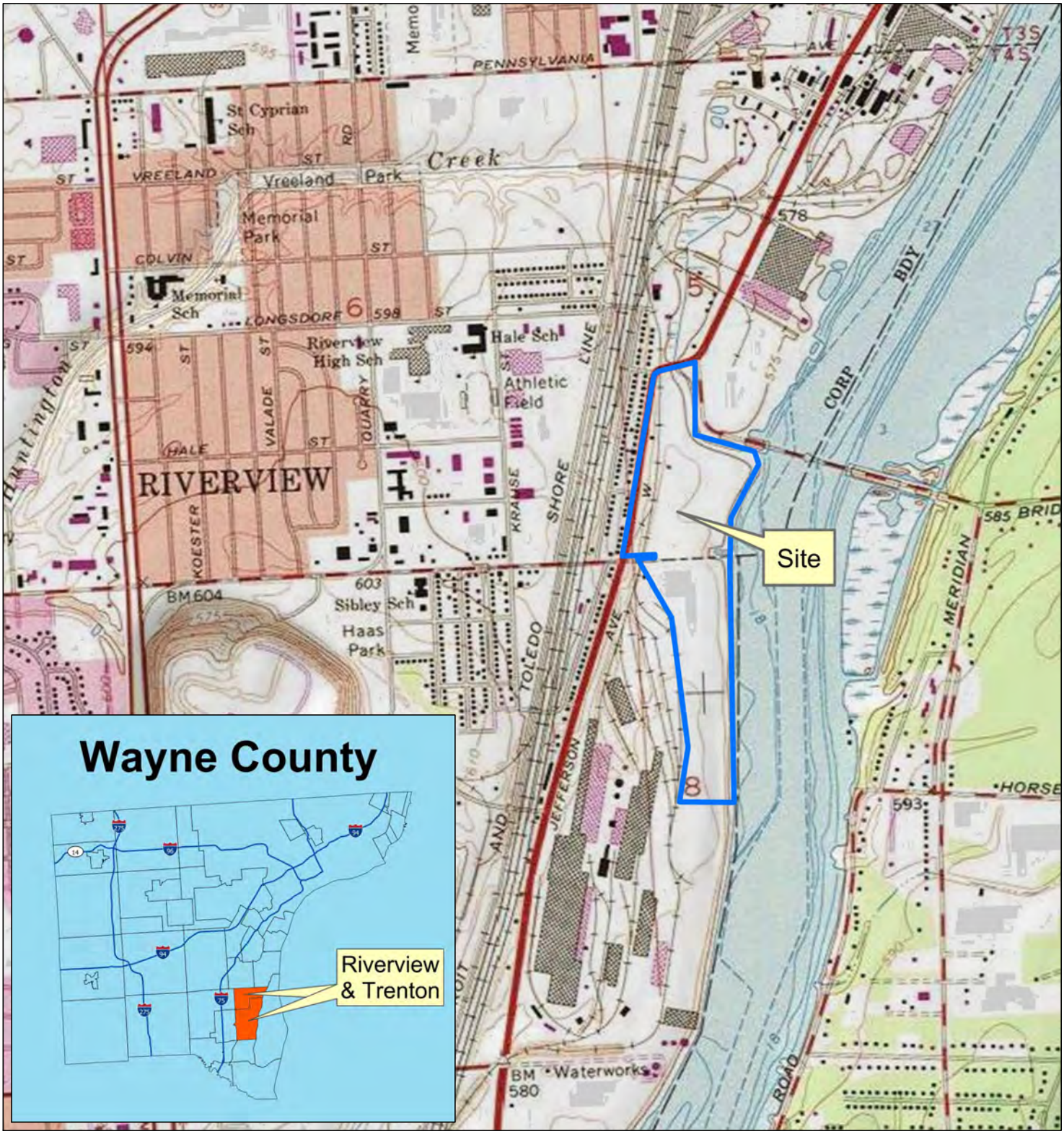
[7] Declaration of Restrictive Covenant, BASF Riverview, Site ID No. 82000016, September 13, 2013

persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Greg S. Oslosky, P.G.
Director – Grand Rapids

FIGURES

1 Site Location Map
2 RTRR Site Features Map
3 Well Location Map
4 Shallow Groundwater Elevation Contour Map – March 18, 2020
5 Shallow Groundwater Elevation Contour Map – July 7, 2020
6 Shallow Groundwater Elevation Contour Map – July 29, 2020
7 Groundwater Concentrations Exceeding GNRCC Map –Metals
8 Groundwater Concentrations Exceeding GNRCC Map -VOCs and SVOCs



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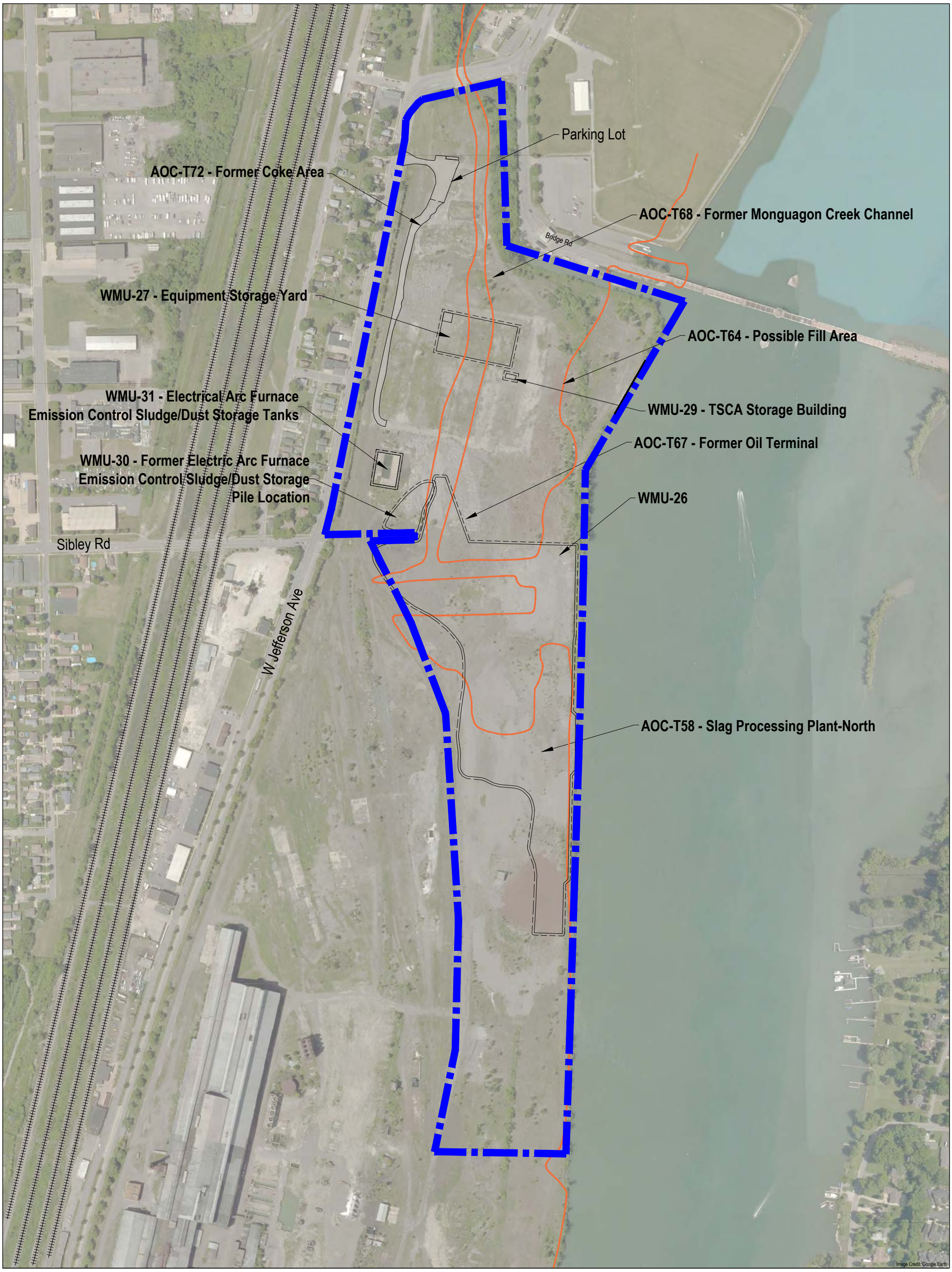
RTRR - Groundwater Investigation 18251 West Jefferson

Created for: Riverview-Trenton Railroad Company Riverview, MI Figure 1 - Site Location Map

ASTI Project 10860, JRN, March 3, 2020

ASTI Environmental



GRAPHIC SCALE

0 200 400 800

1 inch = 400 ft.
Paper Size = (11x17)

LEGEND

- Subject Property
- WMU
- Historic Creek Bed

RTRR Property

18251 West Jefferson Avenue, Trenton, MI

ASTI Environmental

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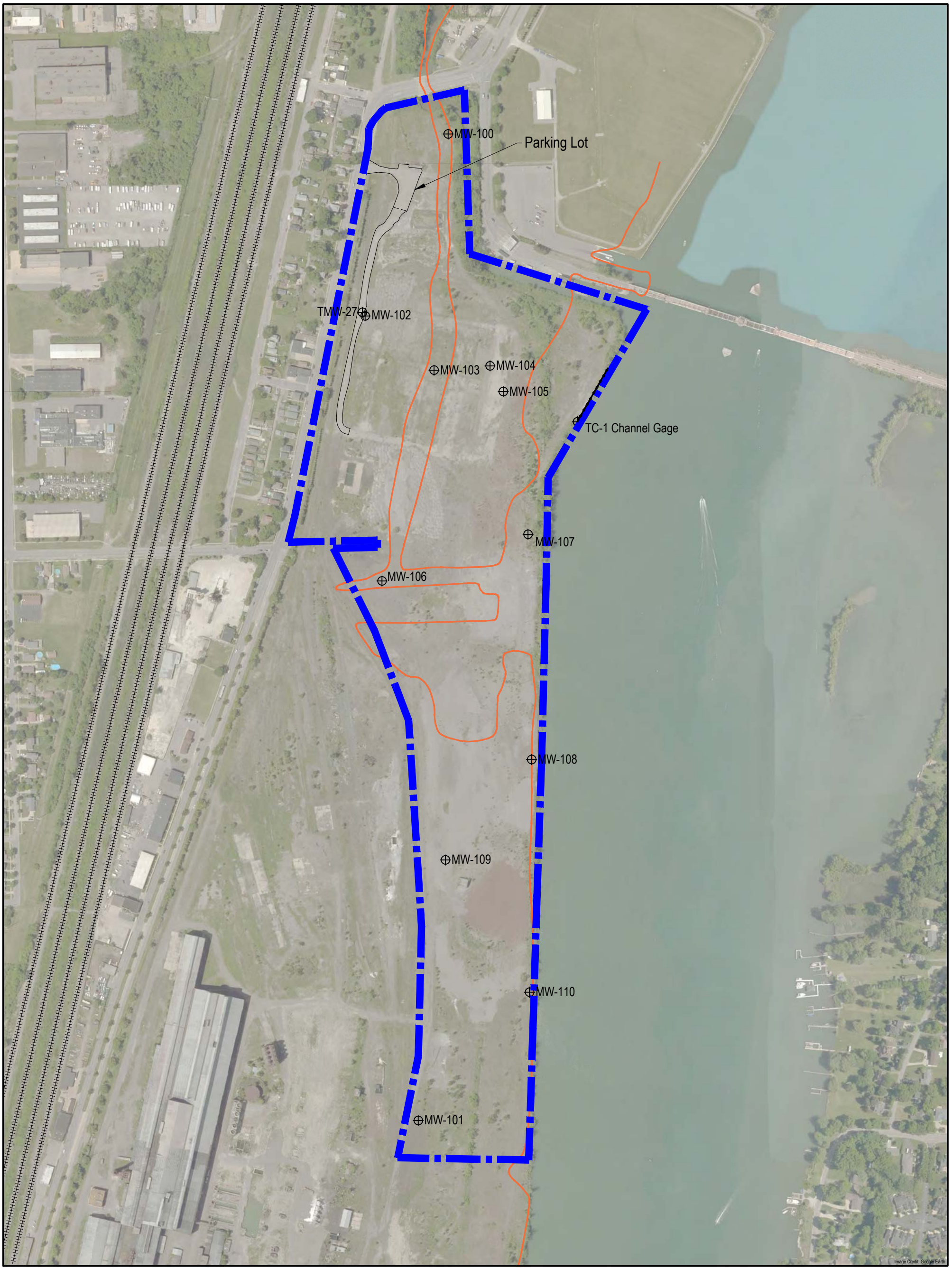
Created for: Riverview-Trenton Railroad Company

Figure 2 - Site Features Map & Identified Waste Management Units

ASTI Project 10860, JRN/JMD, April 6, 2021



GRAPHIC SCALE
0 200 400 800
1 inch = 400 ft.
Paper Size = (11x17)

LEGEND
Subject Property
Historic Creek Bed
TC-1: Trenton Channel Gauging Location

N

ASTI Environmental

RTRR Property

18251 West Jefferson Avenue, Riverview, MI

Created for: Riverview-Trenton Railroad Company

Figure 3 - Monitoring Well Locations and Former Creek Bed

ASTI Project 10860, JMD, April 12, 2021

GRAPHIC SCALE

0 200 400 800

1 inch = 400 ft.
Paper Size = (11x17)

LEGEND

- Subject Property
- Historic Creek Bed
- TC-1: Trenton Channel Gauging Location
- MW-101 / 577.80 — Monitoring Well Location ID and Groundwater Elevation (Ft. AMSL)
- Groundwater Flow Direction
- Groundwater Elevation Contour. (Dashed where inferred)
- 00.00* — * Elevations not used for contour development
- ND — No Groundwater Elevation Data

RTRR Property

18251 West Jefferson Avenue, Riverview, MI

ASTI Environmental

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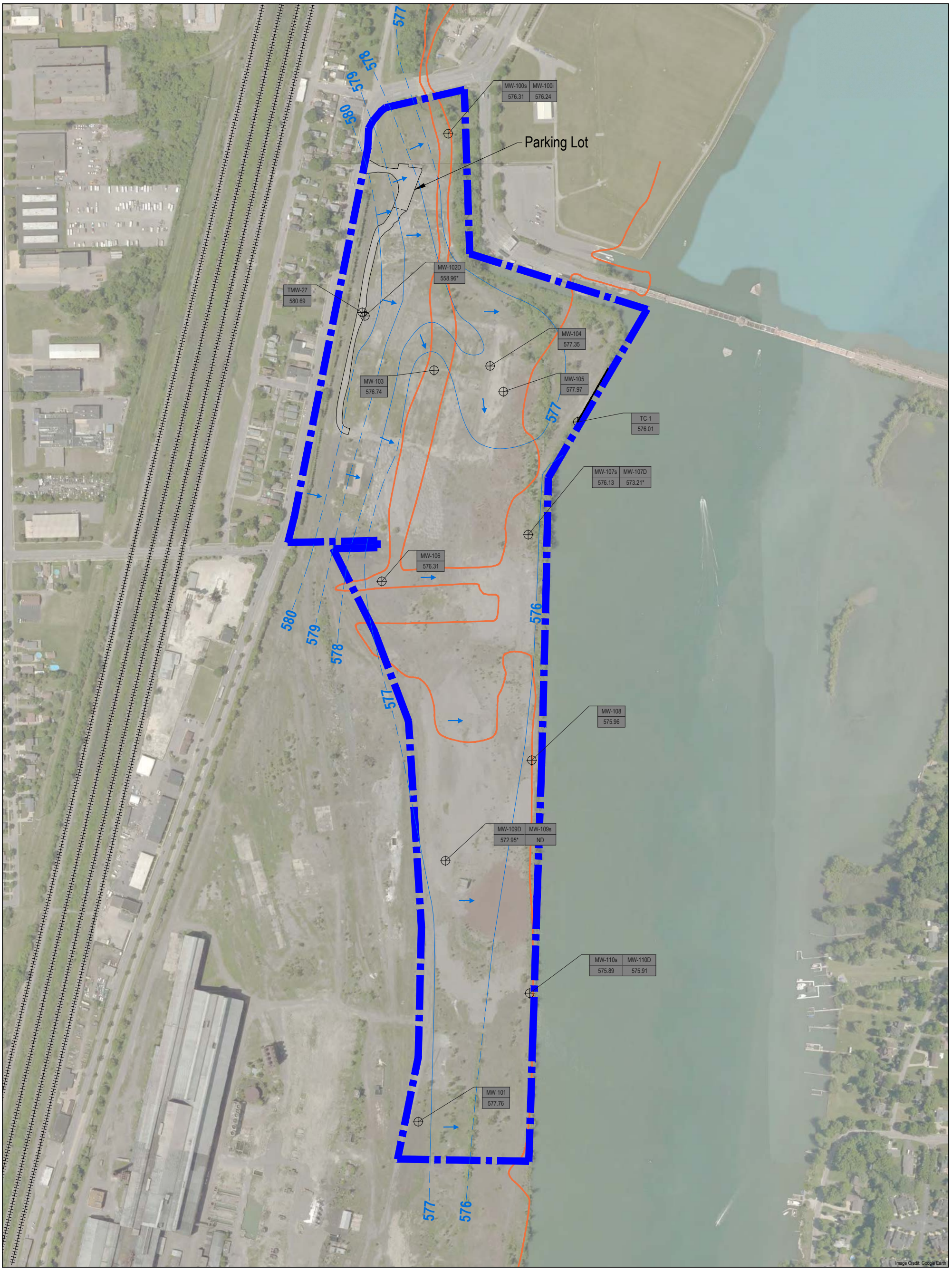
Created for: Riverview-Trenton Railroad Company

ASTI Project 10860, JMD, April 12, 2021

Figure 4 - Shallow Groundwater Elevation Contour Map

Second Quarterly Groundwater Sampling Event, March 18, 2020



GRAPHIC SCALE

0 200 400 800

1 inch = 400 ft.

Paper Size = (11x17)

LEGEND

- Subject Property
- Historic Creek Bed
- TC-1: Trenton Channel Gauging Location
- MW-101 / 577.80 — Monitoring Well Location ID and Groundwater Elevation (Ft. AMSL)
- Groundwater Flow Direction
- Groundwater Elevation Contour. (Dashed where inferred)
- 00.00* — * Elevations not used for contour development
- ND — No Groundwater Elevation Data

RTRR Property

18251 West Jefferson Avenue, Riverview, MI

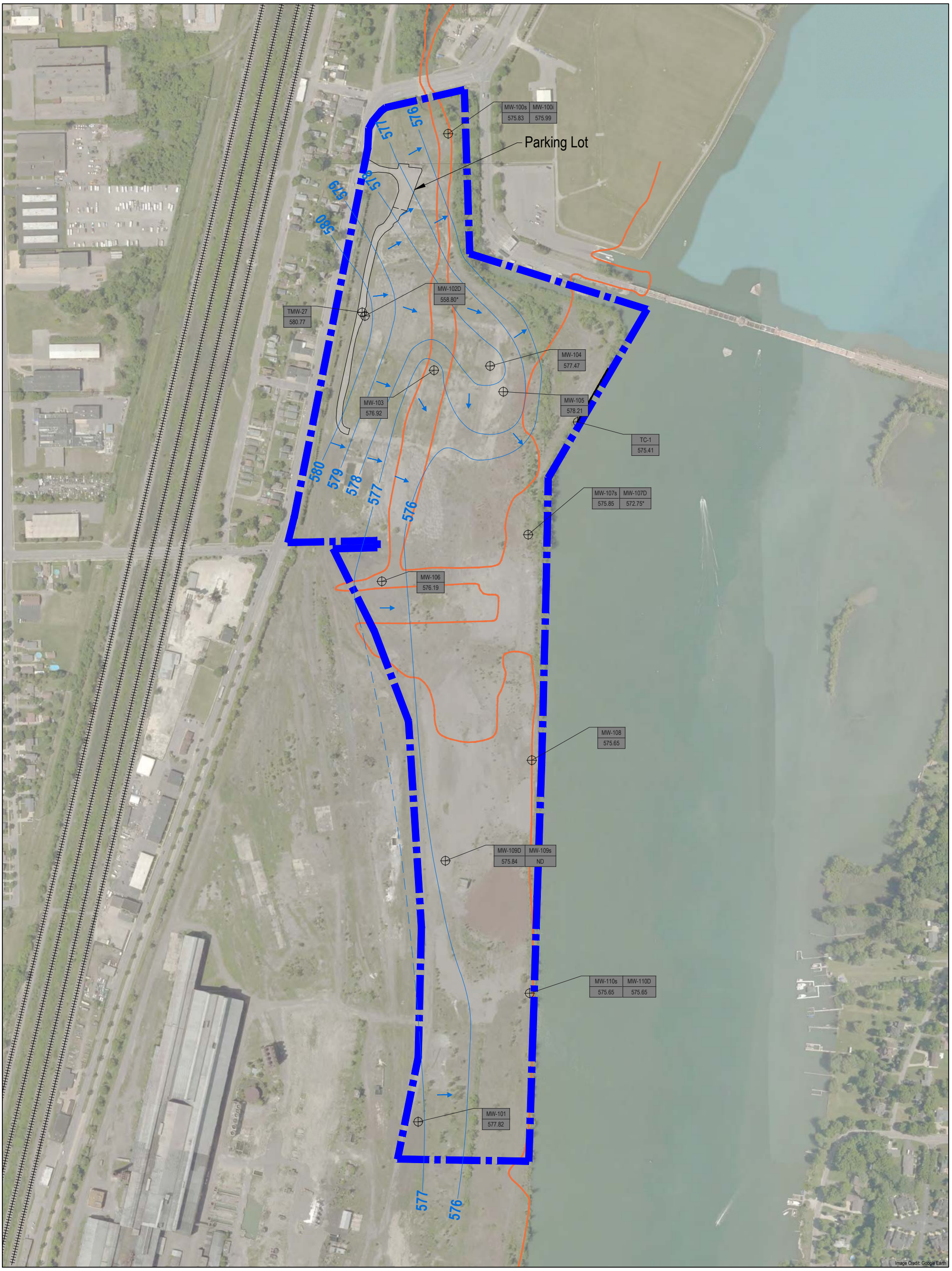
ASTI Environmental

Created for: Riverview-Trenton Railroad Company

Figure 5 - Shallow Groundwater Elevation Contour Map

ASTI Project 10860, JMD, April 12, 2021

July 7, 2020



GRAPHIC SCALE

0 200 400 800

1 inch = 400 ft.

Paper Size = (11x17)

LEGEND

- Subject Property
- Historic Creek Bed
- TC-1: Trenton Channel Gauging Location
- MW-101 / 577.80 — Monitoring Well Location ID and Groundwater Elevation (Ft. AMSL)
- Groundwater Flow Direction
- Groundwater Elevation Contour. (Dashed where inferred)
- 00.00* — * Elevations not used for contour development
- ND — No Groundwater Elevation Data

RTRR Property

18251 West Jefferson Avenue, Riverview, MI

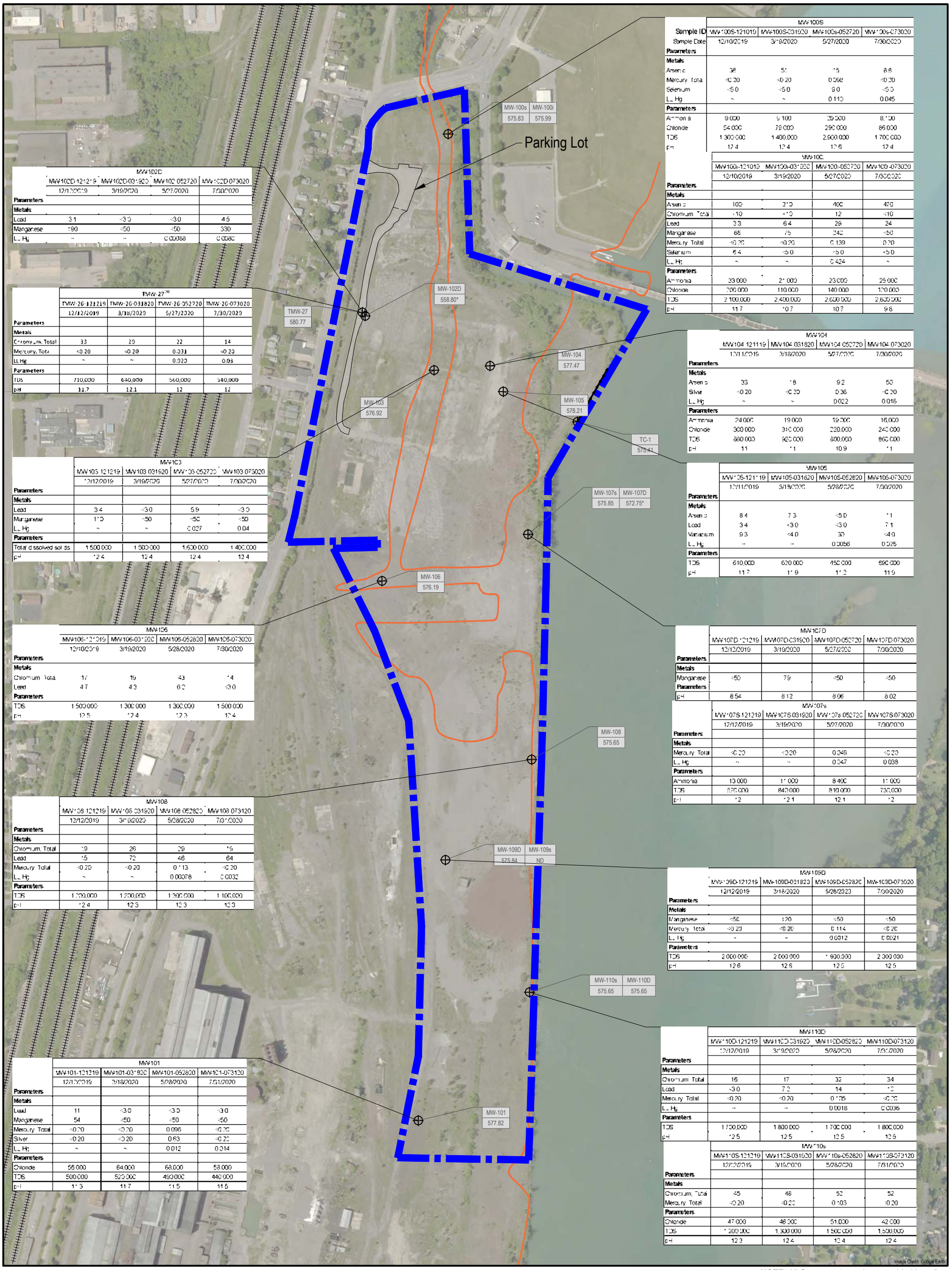
ASTI Environmental

Created for: Riverview-Trenton Railroad Company

ASTI Project 10860, JMD, April 12, 2021

Figure 6 - Shallow Groundwater Elevation Contour Map

Fourth Quarterly Groundwater Sampling Event, July 29, 2020



	MW-102D			
	MW-102D-121219	MW-102D-031920	MW-102-052720	MW-102D-073020
	12/12/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Lead	3.1	<3.0	<3.0	4.5
Manganese	190	<50	<50	330
LL Hg	~	~	0.00088	0.0082

	TMW-27[M]			
	TMW-27-121219	TMW-27-031820	TMW-27-052720	TMW-27-073020
	12/12/2019	3/18/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Chromium, Total	33	29	22	14
Mercury, Total	<0.20	<0.20	0.031	<0.20
LL Hg	~	~	0.023	0.03
Parameters				
TDS	710,000	640,000	560,000	540,000
pH	11.7	12.1	12	12

	MW-103			
	MW-103-121219	MW-103-031920	MW-103-052720	MW-103-073020
	12/12/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Lead	3.4	<3.0	5.9	<3.0
Manganese	110	<50	<50	<50
LL Hg	~	~	0.027	0.04
Parameters				
Total dissolved solids	1,500,000	1,500,000	1,600,000	1,400,000
pH	12.4	12.4	12.4	12.4

	MW-106			
	MW-106-121219	MW-106-031920	MW-106-052820	MW-106-073020
	12/10/2019	3/19/2020	5/28/2020	7/30/2020
Parameters				
Metals				
Chromium, Total	17	19	43	14
Lead	4.7	4.3	6.2	<3.0
Parameters				
TDS	1,500,000	1,300,000	1,300,000	1,500,000
pH	12.5	12.4	12.3	12.4

	MW-108			
	MW-108-121219	MW-108-031920	MW-108-052820	MW-108-073120
	12/12/2019	3/19/2020	5/28/2020	7/31/2020
Parameters				
Metals				
Chromium, Total	19	26	29	19
Lead	<5	7.2	4.6	6.4
Mercury, Total	<0.20	<0.20	0.113	<0.20
LL Hg	~	~	0.00078	0.0032
Parameters				
TDS	1,200,000	1,200,000	1,300,000	1,100,000
pH	12.4	12.3	12.3	12.3

	MW-101			
	MW-101-121219	MW-101-031820	MW-101-052820	MW-101-073120
	12/10/2019	3/18/2020	5/28/2020	7/31/2020
Parameters				
Metals				
Lead	11	<3.0	<3.0	<3.0
Manganese	54	<50	<50	<50
Mercury, Total	<0.20	<0.20	0.096	<0.20
Silver	<0.20	<0.20	0.63	<0.20
LL Hg	~	~	0.012	0.014
Parameters				
Chloride	55,000	64,000	68,000	58,000
TDS	500,000	520,000	490,000	440,000
pH	11.3	11.7	11.5	11.5

	MW-100S			
Sample ID	MW-100S-121019	MW-100S-031920	MW-100s-052720	MW-100s-073020
Sample Date	12/10/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Arsenic	38	51	15	8.8
Mercury, Total	<0.20	<0.20	0.098	<0.20
Selenium	<5.0	<5.0	9.0	<5.0
LL Hg	~	~	0.110	0.045
Parameters				
Ammonia	9,000	9,100	29,000	8,700
Chloride	84,000	78,000	290,000	86,000
TDS	1,300,000	1,400,000	2,900,000	1,700,000
pH	12.4	12.4	12.6	12.4

	MW-100i			
	MW-100i-121019	MW-100i-031920	MW-100i-052720	MW-100i-073020
	12/10/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Arsenic	100	210	400	470
Chromium, Total	<10	<10	12	<10
Lead	3.3	6.4	29	24
Manganese	68	75	240	<50
Mercury, Total	<0.20	<0.20	0.139	0.20
Selenium	6.4	<5.0	<5.0	<5.0
LL Hg	~	~	0.424	~
Parameters				
Ammonia	33,000	21,000	23,000	25,000
Chloride	200,000	110,000	140,000	120,000
TDS	2,100,000	2,400,000	2,600,000	2,600,000
pH	11.7	10.7	10.7	9.8

	MW-104			
	MW-104-121119	MW-104-031820	MW-104-052720	MW-104-073020
	12/11/2019	3/18/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Arsenic	33	18	9.2	50
Silver	<0.20	<0.20	0.36	<0.20
LL Hg	~	~	0.022	0.016
Parameters				
Ammonia	24,000	19,000	19,000	16,000
Chloride	300,000	310,000	220,000	240,000
TDS	880,000	920,000	800,000	860,000
pH	11	11	10.9	11

	MW-105			
	MW-105-121119	MW-105-031820	MW-105-052820	MW-105-073020
	12/11/2019	3/18/2020	5/28/2020	7/30/2020
Parameters				
Metals				
Arsenic	8.4	7.3	<5.0	11
Lead	3.4	<3.0	<3.0	7.1
Vanadium	9.3	<4.0	30	<4.0
LL Hg	~	~	0.0056	0.025
Parameters				
TDS	810,000	820,000	750,000	880,000
pH	11.7	11.9	11.2	11.9

	MW-107D			
	MW-107D-121219	MW-107D-031920	MW-107D-052720	MW-107D-073020
	12/12/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Manganese	<50	79	<50	<50
Parameters				
pH	8.54	8.12	8.06	8.02

	MW-107S			
	MW-107S-121219	MW-107S-031920	MW-107s-052720	MW-107S-073020
	12/12/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
Metals				
Mercury, Total	<0.20	<0.20	0.049	<0.20
LL Hg	~	~	0.047	0.038
Parameters				
Ammonia	13,000	11,000	8,400	11,000
TDS	870,000	840,000	810,000	730,000
pH	12	12.1	12.1	12

	MW-109D			
	MW-109D-121219	MW-109D-031820	MW-109D-052820	MW-109D-073020
	12/12/2019	3/18/2020	5/28/2020	7/30/2020
Parameters				
Metals				
Manganese	<50	120	<50	<50
Mercury, Total	<0.20	<0.20	0.114	<0.20
LL Hg	~	~	0.0012	0.0021
Parameters				
TDS	2,000,000	2,000,000	1,900,000	2,300,000
pH	12.6	12.6	12.5	12.5

	MW-110D			
	MW-110D-121219	MW-110D-031920	MW-110D-052820	MW-110D-073120
	12/12/2019	3/19/2020	5/28/2020	7/31/2020
Parameters				
Metals				
Chromium, Total	16	17	32	34
Lead	<3.0	7.2	14	10
Mercury, Total	<0.20	<0.20	0.126	<0.20
LL Hg	~	~	0.0018	0.0036
Parameters				
TDS	1,700,000	1,800,000	1,700,000	1,800,000
pH	12.5	12.5	12.5	12.5

	MW-110s			
	MW-110S-121219	MW-110S-031920	MW-110s-052820	MW-110S-073120
	12/12/2019	3/19/2020	5/28/2020	7/31/2020
Parameters				
Metals				
Chromium, Total	45	48	52	52
Mercury, Total	<0.20	<0.20	0.103	<0.20
Parameters				
Chloride	47,000	48,000	51,000	42,000
TDS	1,200,000	1,300,000	1,500,000	1,500,000
pH	12.3	12.4	12.4	12.4

Image Credit: Google Earth

GRAPHIC SCALE
0 200 400 800
1 inch = 400 ft.
Paper Size = (11x17)

LEGEND
- Subject Property
- Historic Creek Bed
- TC-1: Trenton Channel Gauging Location
- MW-101 / 577.80: Monitoring Well Location ID and Groundwater Elevation (Ft. AMSL)
- Stormwater Flow Arrow
- Groundwater Elevation Contour. (Dashed where inferred)
- 00.00* : * Elevations not used for contour development
- ND: No Groundwater Elevation Data

NOTE: All Concentration values provided in µg/L

RTRR Property

18251 West Jefferson Avenue, Riverview, MI

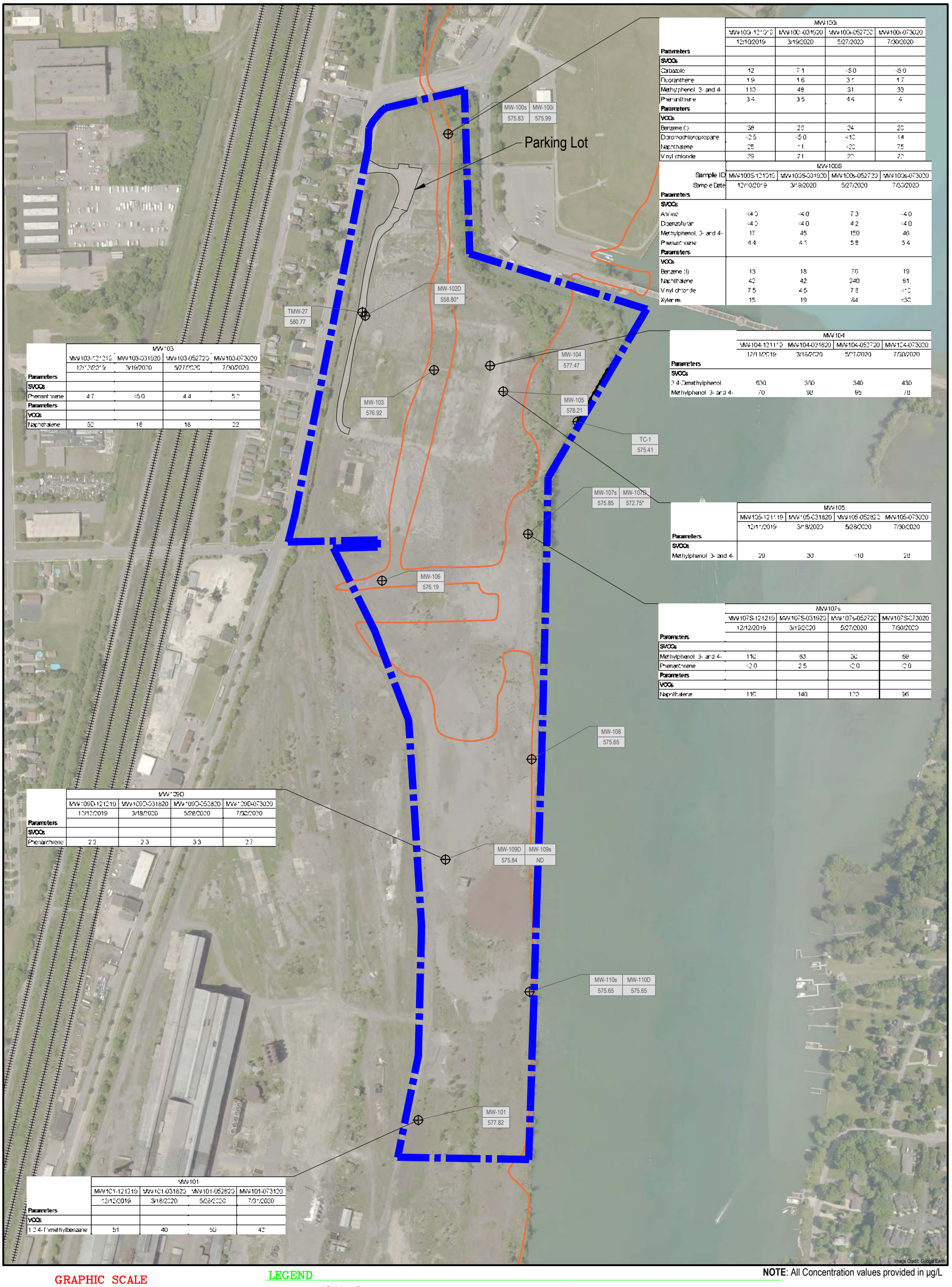
ASTI Environmental

Created for: Riverview-Trenton Railroad Company

ASTI Project 10860, JMD, April 12, 2021

Figure 7 - Groundwater Analytical Results - Metals - Map

Fourth Quarterly Groundwater Sampling Event, July 29, 2020



	MW-103			
	MW-103-121219	MW-103-031920	MW-103-052720	MW-103-073020
	12/12/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
SVOCs				
Phenanthrene	47	<5.0	44	5.2
Parameters				
VOCs				
Naphthalene	52	18	16	22

	MW-100i			
	MW-100i-121019	MW-100i-031920	MW-100i-052720	MW-100i-073020
	12/10/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
SVOCs				
Carbazole	12	7.1	<5.0	<5.0
Fluoranthene	19	16	3.1	1.7
Methylphenol, 3- and 4-	110	48	31	33
Phenanthrene	34	35	44	4
Parameters				
VOCs				
Benzene (I)	38	28	24	28
Dibromochloropropane	<25	<50	<10	14
Naphthalene	25	11	<20	75
Vinyl chloride	29	21	22	22

	MW-100S			
Sample ID	MW-100S-121019	MW-100S-031920	MW-100s-052720	MW-100s-073020
Sample Date	12/10/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
SVOCs				
Aniline	<4.0	<4.0	7.3	<4.0
Dibenzofuran	<4.0	<4.0	4.2	<4.0
Methylphenol, 3- and 4-	17	45	150	46
Phenanthrene	4.4	4.1	5.8	5.4
Parameters				
VOCs				
Benzene (I)	13	18	76	19
Naphthalene	42	42	240	81
Vinyl chloride	7.5	4.5	7.8	<1.0
Xylenes	15	19	84	<3.0

	MW-104			
	MW-104-121119	MW-104-031820	MW-104-052720	MW-104-073020
	12/11/2019	3/18/2020	5/27/2020	7/30/2020
Parameters				
SVOCs				
2,4-Dimethylphenol	630	360	340	430
Methylphenol, 3- and 4-	70	90	95	79

	MW-105			
	MW-105-121119	MW-105-031820	MW-105-052820	MW-105-073020
	12/11/2019	3/18/2020	5/28/2020	7/30/2020
Parameters				
SVOCs				
Methylphenol, 3- and 4-	29	30	<10	29

	MW-107s			
	MW-107S-121219	MW-107S-031920	MW-107s-052720	MW-107S-073020
	12/12/2019	3/19/2020	5/27/2020	7/30/2020
Parameters				
SVOCs				
Methylphenol, 3- and 4-	110	53	30	59
Phenanthrene	<2.0	2.5	<2.0	<2.0
Parameters				
VOCs				
Naphthalene	110	140	120	56

	MW-109D			
	MW-109D-121219	MW-109D-031820	MW-109D-052820	MW-109D-073020
	12/12/2019	3/18/2020	5/28/2020	7/30/2020
Parameters				
SVOCs				
Phenanthrene	2.2	2.3	3.3	2.7

	MW-101			
	MW-101-121219	MW-101-031820	MW-101-052820	MW-101-073120
	12/12/2019	3/18/2020	5/28/2020	7/31/2020
Parameters				
VOCs				
1,2,4-Trimethylbenzene	51	40	50	42

GRAPHIC SCALE
0 200 400 800
1 inch = 400 ft.
Paper Size = (11x17)

LEGEND
- Subject Property
- Historic Creek Bed
- TC-1: Trenton Channel Gauging Location
- MW-101 / 577.80: Monitoring Well Location ID and Groundwater Elevation (Ft. AMSL)
- Stormwater Flow Arrow
- Groundwater Elevation Contour. (Dashed where inferred)
- 00.00* : * Elevations not used for contour development
- ND: No Groundwater Elevation Data

NOTE: All Concentration values provided in µg/L

Image Credit: Google Earth

RTRR Property

18251 West Jefferson Avenue, Riverview, MI

Created for: Riverview-Trenton Railroad Company

Figure 8 - Groundwater Analytical Results - VOCs & SVOCs - Map

ASTI Project 10860, JMD, April 12, 2021

ASTI Environmental

TABLES

1 Summary of Groundwater Monitoring Wells
2 Summary of Groundwater Elevations
3 Summary of Slug Test Data
4 Summary of Groundwater Analytical Results
5 Groundwater Flow Calculations
6 Representative Concentrations
7a Chemical Mass Loading – Northern Flow Zone
7b Chemical Mass Loading – Southern Flow Zone

Table 1
Summary of Groundwater Monitoring Wells
Depth, Elevation, and Location
RTRR - Riverview
18251 W. Jefferson, Riverview
ASTI Project No.: 10860

					Screen Interval (ft. BGS)			Screen Elevation (ft. AMSL)		Location[3]	
Location ID	Monitoring Well ID	Total Drilled Depth (ft. BGS)[1]	Well Depth (ft. BGS)	Top of PVC Elevation (ft. AMSL)[2]	Top of Screen	Bottom of Screen	Screen Length (ft.)	Top of Screen	Bottom of Screen	Easting	Northing
MW-100	MW-100s	27	14	581.97	4	14	10	574.4	564.4	13448499.446	248577.372
	MW-100i		27	581.92	17	27	10	561.4	551.4		
MW-101	MW-101	30	30	593.15	10	30	20	579.5	559.5	13448459.271	244290.332
MW-102D	MW-102D	55	55	592.05	50	55	5	539.5	534.5	13448148.742	247771.931
TMW-27	TMW-27	16	14	592.02	4	14	10	583.8	573.8	13448116.296	247779.702
MW-103	MW-103	27	27	592.11	7	27	20	572.5	562.5	13448472.443	247545.746
MW-104	MW-104	55	19	591.68	9	19	10	579.4	569.4	13448716.549	247573.896
MW-105	MW-105	13	13	592.15	3	13	10	585.7	575.7	13448776.156	247457.881
MW-106	MW-106	25	15	593.87	5	25	20	585.7	565.7	13448256.357	246609.325
MW-107	MW-107s	48	19	590.47	9	19	10	577.5	567.5	13448892.413	246834.696
	MW-107D		48	590.19	43	48	5	543.5	538.5		
MW-108	MW-108	35	35	595.18	20	35	15	572.1	557.1	13448926.796	245839.708
MW-109	MW-109S	30	10	599.91	5	10	5	591.0	586.0	13448543.489	245393.964
	MW-109D		30	599.93	25	30	5	571.0	566.0		
MW-110	MW-110S	31	19	591.23	9	19	10	578.5	568.5	13448929.408	244810.710
	MW-110D		31	591.22	26	31	5	561.5	556.5		

Notes:
(1) "ft. BGS" - feet below ground surface
(2) "ft. AMSL" - feet above mean sea level
(3) State Plane 2113 - Michigan South

Table 2
Summary of Ground Water Elevations
RTRR - Riverview
18251 W. Jefferson Ave., Riverview, MI
ASTI Project No. 10860

		1st Quarterly Event			2nd Quarterly Event			3rd Quarterly Event			July 7, 2020 Gauging Event			4th Quarterly Event		
	Date	12/10/2019			3/18/2020			5/27/2020			7/7/2020			7/29/2020		
Well ID	Top of Casing Elevation (ft. AMSL)[1]	Measuring Point	Depth to Water (ft. BGS)[2]	Groundwater Elevation (ft. AMSL)	Measuring Point	Depth to Water (ft. BTOC)[3]	Groundwater Elevation (ft. AMSL)	Measuring Point	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. AMSL)	Measuring Point	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. AMSL)	Measuring Point	Depth to Water (ft. BTOC)	Groundwater Elevation (ft. AMSL)
MW-100s	581.973	GS[4]	4.09	-[5]	TOC[6]	6.65	575.32	GS	2.50	-	TOC	5.66	576.31	TOC	6.14	575.83
MW-100i	581.923	GS	4.17	-	TOC	6.62	575.30	GS	2.50	-	TOC	5.68	576.24	TOC	5.93	575.99
MW-101	593.148	GS	11.92	-	TOC	15.35	577.80	TOC	15.00	578.15	TOC	15.39	577.76	TOC	15.33	577.82
MW-102D	592.052	GS	31.88	-	TOC	34.3	557.75	TOC	33.64	558.41	TOC	33.09	558.96	TOC	33.25	558.80
MW-103	592.112	GS	11.07	-	TOC	15.97	576.14	GS	11.35	-	TOC	15.37	576.74	TOC	15.19	576.92
MW-104	591.683	GS	10.94	-	TOC	14.15	577.53	GS	10.22	-	TOC	14.33	577.35	TOC	14.21	577.47
MW-105	592.148	GS	10.52	-	TOC	14.25	577.90	GS	10.20	-	TOC	14.18	577.97	TOC	13.94	578.21
MW-106	593.874	GS	16.3	-	TOC	18.2	575.67	TOC	17.20	576.67	TOC	17.56	576.31	TOC	17.68	576.19
MW-107s	590.473	GS	11.15	-	TOC	15.08	575.39	TOC	15.55	574.92	TOC	14.34	576.13	TOC	14.62	575.85
MW-107D	590.193	GS	14.97	-	TOC	18.33	571.86	TOC	19.07	571.12	TOC	16.98	573.21	TOC	17.44	572.75
MW-108	595.178	GS	17.52	-	TOC	19.87	575.31	TOC	19.25	575.93	TOC	19.22	575.96	TOC	19.53	575.65
MW-109s	599.906	GS	Dry[7]	-	TOC	Dry	-	TOC	Dry	-	TOC	Dry	-	TOC	Dry	-
MW-109D	599.926	GS	21.17	-	TOC	24.45	575.48	TOC	25.02	574.91	TOC	26.98	572.95	TOC	24.09	575.84
MW-110s	591.227	GS	13.08	-	TOC	15.95	575.28	TOC	16.37	574.86	TOC	15.34	575.89	TOC	15.58	575.65
MW-110D	591.217	GS	13.03	-	TOC	15.88	575.34	TOC	16.42	574.80	TOC	15.31	575.91	TOC	15.57	575.65
TMW-27	592.016	N/A	N/A	-	TOC	11.52	580.50	GS	9.23	-	TOC	11.33	580.69	TOC	11.25	580.77
Trenton Channel[8]	579.324	Top of Wall	4.12	575.20	Top of Wall	3.98	575.34	Top of Wall	3.50	575.82	Top of Wall	3.31	576.01	Top of Wall	3.91	575.41

Notes:

(1) - ft. AMSL denotes feet above mean seal level. The measuring point elevation is the top of PVC casing.

(2) - ft. BGS - denotes feet below ground surface.

(3) - ft. BTOC - denotes feet below top of casing.

(4) - "GS" - Ground Surface.

(5) - "-" groundwater elevation not calculated. Measurements collected from the ground surface were not precise enough for calculation of accurate elevations

(6) - "TOC" Top of Casing.

(7) - "Dry" indicates no water in the well.

(8) - Trenton Channel measurments collected from top of sheet-pile wall at surveyed location

Table 3
Summary of Slug Test Data
August 4, 2020
RTRR - Riverview
18251 West Jefferson Ave, Riverview, MI
ASTI Project No.: 10860

Well ID	Test ID	Test Type	Hydraulic Conductivity	Units	Average Value (per well)	Units	Screened Interval
MW-100s	Slug In 1	Falling Head	1.8	ft/day	1.8	ft/day	silty sand and gravel, gravel, clayey sand and gravel
MW-100i	Slug In 1	Falling Head	0.26	ft/day			
MW-100i	Slug Out 1	Rising Head	0.093	ft/day	0.18	ft/day	clayey sand
MW-101	Slug In	Falling Head	5.0	ft/day			
MW-101	Slug Out	Rising Head	0.25	ft/day	2.63	ft/day	silty sand
MW-104	Slug In 1	Falling Head	3.5	ft/day	3.5	ft/day	clayey sand
MW-109D	Slug In 1	Falling Head	11	ft/day			
MW-109D	Slug Out 1	Rising Head	11	ft/day			
MW-109D	Slug In 2	Falling Head	18	ft/day			
MW-109D	Slug Out 2	Rising Head	11	ft/day	12.8	ft/day	fine sand

Geometric Mean:	2.1 ft/day

Note:
Previous slug testing conducted by others resulted in a hydraulic conductivity of 14.7 ft/day (1.02E-02 ft/min).

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	Well ID	MW-100S				MW-100i				MW-101				MW-102D			
					Sample ID	MW-100S-121019	MW-100S-031920	MW-100s-052720	MW-100s-073020	MW-100i-121019	MW-100i-031920	MW-100i-052720	MW-100i-073020	MW-101-121219	MW-101-031820	MW-101-052820	MW-101-073120	MW-102D-121219	MW-102D-031920	MW-102-052720	MW-102D-073020
					Date	12/10/2019	3/19/2020	5/27/2020	7/30/2020	12/10/2019	3/19/2020	5/27/2020	7/30/2020	12/12/2019	3/18/2020	5/28/2020	7/31/2020	12/12/2019	3/19/2020	5/27/2020	7/30/2020
					Units																
Metals																					
Arsenic	7440-38-2	10 (A)	10	NLV	µg/L[2]	38	51	15	8.8	100	210	400	470	6	5.5	7.2	5.3	<5.0	<5.0	<5.0	<5.0
Barium	7440-39-3	2,000 (A)	(G)	NLV	µg/L	120	190	670	320	<100	<100	<100	<100	120	130	130	110	110	<100	<100	110
Chromium, Total	7440-47-3	100 (A)	11	NLV	µg/L	<10	<10	<10	<10	<10	<10	12	<10	<10	<10	<10	<10	<10	<10	<10	<10
Copper	7440-50-8	1,000 (E)	(G)	NLV	µg/L	<4.0	<4.0	<4.0	<4.0	<4.0	6.2	27	22	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.5
Lead	7439-92-1	4.0 (L)	(G,X)	NLV	µg/L	<3.0	<3.0	<3.0	<3.0	3.3	6.4	29	24	11	<3.0	<3.0	<3.0	3.1	<3.0	<3.0	4.5
Manganese	7439-96-5	50 (E)	(G,X)	NLV	µg/L	<50	<50	<50	<50	86	75	240	<50	54	<50	<50	<50	190	<50	<50	330
Mercury, Total	7439-97-6	2.0 (A)	0.0013	56 (S)	µg/L	<0.20	<0.20	0.098	<0.20	<0.20	<0.20	0.139	0.20	<0.20	<0.20	0.096	<0.20	<0.20	<0.20	<0.025	<0.20
Nickel	7440-02-0	100 (A)	(G)	NLV	µg/L	<20	<20	35	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Selenium	7782-49-2	50 (A)	5	NLV	µg/L	<5.0	<5.0	9.0	<5.0	6.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	7440-22-4	98	0.2 (M); 0.06	NLV	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.63	<0.20	<0.20	<0.20	<0.20	<0.20
Vanadium	7440-62-2	62	27	NLV	µg/L	<4.0	<4.0	<4.0	<4.0	12	13	15	16	<4.0	<4.0	<4.0	<4.0	4	<4.0	<4.0	12
Zinc	7440-66-6	5,000 (E)	(G)	NLV	µg/L	<50	<50	<50	<50	<50	<50	60	<50	<50	<50	<50	<50	<50	<50	<50	<50
Mercury, Low Level Analysis	7439-97-6	2.0 (A)	0.0013	56 (S)	µg/L	~	~	0.110	0.045	~	~	0.424	~	~	~	0.012	0.014	~	~	0.00088	0.0080
Semi Volatile Organic Compounds																					
Acenaphthene	83-32-9	3,800	38	4,200 (S)	µg/L	<5.0	<5.0	6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acenaphthylene	208-96-8	150	ID	3,900 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Aniline	62-53-3	220	4.0 (M); 3.0	NLV	µg/L	<4.0	<4.0	7.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Anthracene	120-12-7	43 (S)	ID	43 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Azobenzene	103-33-3	94	ID	6,400 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)anthracene (Q)	56-55-3	8.5	ID	NLV	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene (Q)	50-32-8	5.0 (A)	ID	NLV	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene (Q)	205-99-2	1.5 (S, AA)	ID	ID	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0 (M); 0.26 (S)	ID	NLV	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene (Q)	207-08-9	1.0 (M); 0.8 (S)	NA	NLV	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzyl alcohol	100-51-6	29,000	NA	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Bromophenyl Phenylether	101-55-3	-	-	-	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Butyl benzyl phthalate	85-68-7	2,700 (S)	67 (X)	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbazole	86-74-8	350	10 (M); 4.0	NLV	µg/L	<5.0	<5.0	7.8	<5.0	12	7.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chloro-3-methylphenol	59-50-7	420	7.4	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bis(2-chloroethoxy)methane	111-91-1	-	-	-	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Chloroethyl)ether (I)	111-44-4	8.3	1.0 (M); 0.79	210,000	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bis(2-chloroisopropyl) Ether	108-60-1	-	-	-	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
beta-Chloronaphthalene	91-58-7	5,200	NA	ID	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorophenol	95-57-8	130	18	1,100,000	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorophenyl Phenylether	7005-72-3	-	-	-	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene (Q)	218-01-9	1.6 (S)	ID	ID	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenzo(a,h)anthracene (Q)	53-70-3	2.0 (M); 0.85	ID	NLV	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibenzofuran	132-64-9	ID	4.0	10,000 (S)	µg/L	<4.0	<4.0	4.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2,4-Dichlorophenol	120-83-2	210	11	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl phthalate	84-66-2	16,000	110	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol	105-67-9	1,000	380	NLV	µg/L	18	29	39	30	24	14	7.2	7.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dimethyl phthalate	131-11-3	210,000	NA	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-butyl phthalate	84-74-2	2,500	9.7	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dinitrophenol	51-28-5	-	-	-	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<100	<20	<20	<20	<20	<20	<20
2,4-Dinitrotoluene	121-14-2	32	NA	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,6-Dinitrotoluene	606-20-2	-	-	-	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-octyl phthalate	117-84-0	380	ID	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	117-81-7	6.0 (A)	14	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Fluoranthene	206-44-0	210 (S)	1.6	210 (S)	µg/L	1.1	<1.0	1.1	1.2	1.9	1.6	3.1	1.7	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	2,000 (S)	12	2,000 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobenzene (C-66)	118-74-1	1.0 (A)	0.2 (M); 0.0003	3,000	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene (C-46)	87-68-3	42	0.053	3,200 (S)	µg/L	<5.0	<5.0	~	~	<5.0	<5.0	~	~	<5.0	<25	~	~	<5.0	<5.0	~	~
Hexachlorocyclopentadiene (C-56)	77-47-4	50 (A)	ID	420	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	2.0 (M); 0.022 (S)	ID	NLV	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Isophorone	78-59-1	3,100	1,300 (X)	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methyl-4,6-dinitrophenol	534-52-1	20 (M); 7.3	NA	NLV	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<50	<20	<20	<20	<20	<20	<20
2-Methylnaphthalene	91-57-6	750	19	25,000 (S)	µg/L	<5.0	<5.0	7.3	5.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 2-	95-48-7	-	82	-	µg/L	<5.0	<5.0	8.9	<5.0	18	18	13	15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 3- and 4-	MEPH1314	-	25	-	µg/L	17	45	150	46	110	48	31	33	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	88-74-4	-	-	-	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
3-Nitroaniline	99-09-2	-	-	-	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
4-Nitroaniline	100-01-6	-	-	-	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Nitrobenzene (I)	98-95-3	9.6	180 (X)	550,000	µg/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
2-Nitrophenol	88-75-5	58	ID	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Nitrophenol	100-02-7	-	-	-	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<25	<20	<20	<20	<20	<20	<20
N-Nitrosodimethylamine	62-75-9	-	-	-	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Nitroso-di-n-propylamine	621-64-7	5.0 (M); 0.77	NA	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-Nitrosodiphenylamine	86-30-6	1,100	NA	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pentachlorophenol	87-86-5	1.0 (A)	(G,X)	NLV	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<100	<20	<20	<20	<20	<20	<20
Phenanthrene	85-01-8	150	2.0 (M); 1.7	1,000 (S)	µg/L	4.4	4.1	5.8	5.4	3.4	3.5	4.4	4	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Phenol	108-95-2	13,000	450	NLV	µg/L	12	23	57	23	77	44	24	29	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyrene	129-00-0	140 (S)	ID	140 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyridine (I)	110-86-1	21	NA	12,000	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,5-Trichlorophenol	95-95-4	2,100	NA	NLV	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,6-Trichlorophenol	88-06-2	470	5.0	NLV	µg/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5 (A)	0.2 (M); 2.5E-5	45 (S)	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	Well ID	MW-100S				MW-100i				MW-101				MW-102D			
					Sample ID	MW-100S-121019	MW-100S-031920	MW-100s-052720	MW-100s-073020	MW-100i-121019	MW-100i-031920	MW-100i-052720	MW-100i-073020	MW-101-121219	MW-101-031820	MW-101-052820	MW-101-073120	MW-102D-121219	MW-102D-031920	MW-102-052720	MW-102D-073020
					Date	12/10/2019	3/19/2020	5/27/2020	7/30/2020	12/10/2019	3/19/2020	5/27/2020	7/30/2020	12/12/2019	3/18/2020	5/28/2020	7/31/2020	12/12/2019	3/19/2020	5/27/2020	7/30/2020
					Units																
Volatile Organic Compounds																					
Acetone (I)	67-64-1	2,100	1,700	1,000,000,000 (D,S)	µg/L	<50	<50	57	<200	<50	<50	<100	<200	<50	<50	<50	<200	<50	<50	<50	<50
Acrylonitrile (I)	107-13-1	11	2.0 (M); 1.2	190,000	µg/L	<5.0	<2.0	<10	<40	<5.0	<10	<40	<40	<2.0	<2.0	<2.0	<40	<2.0	<2.0	<2.0	<2.0
Benzene (I)	71-43-2	5.0 (A)	200 (X)	35,000	µg/L	13	18	76	19	38	26	24	20	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Bromobenzene (I)	108-86-1	50	NA	390,000	µg/L	<5.0	<1.0	<2.5	<10	<5.0	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Bromochloromethane	74-97-5	-	-	-	µg/L	<2.5	<1.0	<5.0	<20	<2.5	<5.0	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	75-27-4	80 (A,W)	ID	37,000	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Bromoform	75-25-2	80 (A,W)	ID	3,100,000 (S)	µg/L	<5.0	<1.0	<5.0	<20	<5.0	<10	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
Bromomethane	74-83-9	29	5.0 (M); 4.2	9,000	µg/L	<25	<5.0	<25	<100	<10	<20	<100	<100	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0
2-Butanone (MEK) (I)	78-93-3	38,000	2,200	240,000,000 (S)	µg/L	<25	<25	<25	<40	<25	<25	<100	<40	<25	<25	<25	<40	<25	<25	<25	<25
n-Butylbenzene	104-51-8	230	ID	ID	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	3.2	2.7	3.3	<10	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	135-98-8	230	ID	ID	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	1.9	1.7	1.8	<10	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene (I)	98-06-6	230	ID	ID	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Carbon disulfide (I,R)	75-15-0	2,300	ID	550,000	µg/L	<5.0	<5.0	9.6	<20	34	25	<20	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	5.0 (A)	38 (X)	2,400	µg/L	<5.0	<1.0	<2.5	<10	<5.0	<10	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Chlorobenzene (I)	108-90-7	100 (A)	25	470,000 (S)	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Chloroethane	75-00-3	1,700	1,100 (X)	5,700,000 (S)	µg/L	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<20	<40	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<5.0	<5.0
Chloroform	67-66-3	80 (A,W)	350	180,000	µg/L	<2.5	<1.0	<2.5	<10	<5.0	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Chloromethane (I)	74-87-3	1,100	ID	45,000	µg/L	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<20	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0
o-Chlorotoluene (I)	95-49-8	420	ID	370,000 (S)	µg/L	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
Dibromochloromethane	124-48-1	80 (A,W)	ID	110,000	µg/L	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<20	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0
Dibromochloropropane	96-12-8	0.2 (A)	ID	1,200 (S)	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	14	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Dibromomethane	74-95-3	230	NA	ID	µg/L	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
1,2-Dichlorobenzene	95-50-1	600 (A)	13	160,000 (S)	µg/L	<2.5	1.8	5.7	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	541-73-1	19	28	41,000	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	106-46-7	75 (A)	17	74,000 (S)	µg/L	<5.0	<1.0	<5.0	<20	<2.5	<5.0	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	75-71-8	4,800	ID	300,000 (S)	µg/L	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	2,500	740	2,300,000	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane (I)	107-06-2	5.0 (A)	360 (X)	59,000	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethylene	156-59-2	70 (A)	620	210,000	µg/L	5.5	3.3	5.3	<10	21	20	20	22	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethylene	156-60-5	100 (A)	1,500 (X)	200,000	µg/L	<2.5	<1.0	<2.5	<20	<2.5	<5.0	<10	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene (I)	75-35-4	7.0 (A)	130	1,300	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane (I)	78-87-5	5.0 (A)	230 (X)	36,000	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
cis-1,3-Dichloropropylene	10061-01-5	-	-	-	µg/L	<2.5	<0.50	<2.5	<10	<2.5	<5.0	<10	<10	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50
trans-1,3-Dichloropropylene	10061-02-6	-	-	-	µg/L	<2.5	<0.50	<2.5	<10	<2.5	<5.0	<10	<10	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50
Ethylbenzene (I)	100-41-4	74 (E)	18	170,000 (S)	µg/L	<2.5	2.2	9.3	<10	3.1	<5.0	<10	<10	5.9	5.1	5.2	<10	<1.0	<1.0	<1.0	<1.0
Ethylene dibromide	106-93-4	0.05 (A)	5.7 (X)	15,000	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	2,900	ID	8,700,000	µg/L	<50	<50	<50	<50	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50
Isopropyl benzene	98-82-8	2,300	28	56,000 (S)	µg/L	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	5,200	ID	20,000,000 (S)	µg/L	<50	<50	<50	<100	<50	<50	<50	<100	<50	<50	<50	<100	<50	<50	<50	<50
Methylene chloride	75-09-2	5.0 (A)	1,500 (X)	1,400,000	µg/L	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<10	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0
Methyl-tert-butyl ether (MTBE)	1634-04-4	40 (E)	7,100 (X)	47,000,000 (S)	µg/L	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0
Naphthalene	91-20-3	1,500	11	31,000 (S)	µg/L	42	42	240	61	25	11	<20	75	11	7.6	8.7	<20	<5.0	<5.0	<5.0	<5.0
n-Propylbenzene (I)	103-65-1	230	ID	ID	µg/L	<2.5	1.9	<2.5	<10	<2.5	<5.0	<10	<10	4.3	4.1	4.4	<10	<1.0	<1.0	<1.0	<1.0
Styrene	100-42-5	100 (A)	80 (X)	310,000 (S)	µg/L	<5.0	<1.0	<5.0	<20	<2.5	<5.0	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	630-20-6	320	ID	96,000	µg/L	<2.5	<1.0	<5.0	<20	<2.5	<5.0	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	79-34-5	35	78 (X)	77,000	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	11	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	127-18-4	5.0 (A)	60 (X)	170,000	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Toluene (I)	108-88-3	790 (E)	270	530,000 (S)	µg/L	4	5	20	<10	7.5	5.9	<10	<10	1.7	1.6	1.6	<10	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	120-82-1	70 (A)	99 (X)	300,000 (S)	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<25	<5.0	<20	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	200 (A)	89	1,300,000 (S)	µg/L	<2.5	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	79-00-5	5.0 (A)	330 (X)	110,000	µg/L	<2.5	<1.0	<5.0	<20	<2.5	<5.0	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
Trichloroethylene	79-01-6	5.0 (A)	200 (X)	4,900	µg/L	<2.5	<1.0	<2.5	<10	5.0	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	75-69-4	7,300	NA	1,100,000 (S)	µg/L	<5.0	<1.0	<2.5	<10	<2.5	<5.0	<10	<10	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<2.0
1,2,3-Trichloropropane	96-18-4	120	NA	18,000	µg/L	<5.0	<1.0	<5.0	<20	<5.0	<5.0	<20	<20	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0
1,2,3-Trimethylbenzene	526-73-8	-	-	-	µg/L	3.3	3	9.9	<10	6	<5.0	<10	<10	29	25	30	28	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	95-63-6	63 (E)	17	56,000 (S)	µg/L	<5.0	4.6	15	<10	8	5.6	<10	<10	51	40	50	42	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	108-67-8	72 (E)	45	61,000 (S)	µg/L	4.8	4.4	12	<10	12	8.7	<10	<10	13	11	13	13	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	75-01-4	2.0 (A)	13 (X)	13,000	µg/L	7.5	4.5	7.6	<10	29	21	22	22	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
m&p-Xylene	136777-61-2	-	-	-	µg/L	9.9	13	55	<20	17	12	<20	<20	28	23	25	24	<2.0	<2.0	<2.0	<2.0
o-Xylene	95-47-6	-	-	-	µg/L	4.7	6.2	29	<10	7.8	5.6	<10	<10	13	10	11	12	<1.0	<1.0	<1.0	<1.0
Xylenes	1330-20-7	280 (E)	49	190,000 (S)	µg/L	15	19	84	<30	25	17	<30	<30	41	33	36	36	<3.0	<3.0	<3.0	<3.0
Ammonia	7664-41-7	10,000 (N)	(CC)	7,100,000	µg/L	9,000	9,100	29,000	8,100	33,000	21,000	23,000	25,000	3,800	3,200	3,400	3,100	100	61	58	150
Chloride	16887-00-6	250,000 (E)	50,000	NLV	µg/L	54,000	79,000	290,000	86,000	200,000	110,000	140,000	120,000	55,000	64,000	68,000	58,000	15,000	16,000	17,000	16,000
Total dissolved solids	TDS	500,000 (E)	500,000	ID	µg/L	1,300,000	1,400,000	2,900,000	1,700,000	2,100,000	2,400,000	2,600,000	2,800,000	500,000	520,000	490,000	440,000	350,000	320,000	300,000	370,000
pH	PH	6.5 to 8.5 (E)	6.5 to 9.0	ID	S.U.[3]	12.4	12.4	12.6	12.4	11.7	10.7	10.7	9.8	11.3	11.7	11.5	11.5	8.18	8.08	8.25	8.42

Notes:
(1) "CAS Number - Chemical Abstract Number
(2) "µg/L" - micrograms per liter or parts per billion
(3) - "S.U." - standard units
(4) - Samples collected from TMW-27 were labeled as "TMW-26".
"-" - No standard
*Per R299.44, June 25, 2018
~ Parameter not tested for at his location.
ID-Insufficient data to develop criterion.
NA-Not available.
NLV-Hazardous substance is not likely to volatilize under most conditions.
A-Criterion is the State of Michigan drinking water standard established pursuant to Section 5.
D-Calculate criterion exceeds 100%, hence it is reduced to 100% or 1.0e+9 ppb.
E-Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the act.
G-Groundwater Surface Water Interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
L-Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10)
of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.
M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
N-The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitriteN, nitrate-N) in groundwater that is used as a source of drinking water
S-Criterion defaults to the hazardous substance-specific water solubility limit.
W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan
drinking water standard of 100 ug/L.
X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria tables is not protective
for surface water that is used as drinking water source.
AA-Comparison of these criteria may take into account an evaluation of whether the hazardous substances are adsorbed
to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.
CC-The generic GSI criteria are based on the toxicity of unionized ammonia.

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	MW-103				MW-104				MW-105				MW-106			
					MW-103-121219	MW-103-031920	MW-103-052720	MW-103-073020	MW-104-121119	MW-104-031820	MW-104-052720	MW-104-073020	MW-105-121119	MW-105-031820	MW-105-052820	MW-105-073020	MW-106-121019	MW-106-031920	MW-106-052820	MW-106-073020
					12/12/2019	3/19/2020	5/27/2020	7/30/2020	12/11/2019	3/18/2020	5/27/2020	7/30/2020	12/11/2019	3/18/2020	5/28/2020	7/30/2020	12/10/2019	3/19/2020	5/28/2020	7/30/2020
Metals																				
Arsenic	7440-38-2	10 (A)	10	NLV	<5.0	<5.0	<5.0	<5.0	33	18	9.2	50	8.4	7.3	<5.0	11	<5.0	<5.0	<5.0	<5.0
Barium	7440-39-3	2,000 (A)	(G)	NLV	440	400	450	380	<100	<100	<100	<100	<100	<100	<100	<100	250	200	180	240
Chromium, Total	7440-47-3	100 (A)	11	NLV	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	17	19	43	14
Copper	7440-50-8	1,000 (E)	(G)	NLV	6.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.6	6.4	12	5.1	6.9
Lead	7439-92-1	4.0 (L)	(G,X)	NLV	3.4	<3.0	5.9	<3.0	<3.0	<3.0	<3.0	<3.0	3.4	<3.0	<3.0	7.1	4.7	4.3	6.2	<3.0
Manganese	7439-96-5	50 (E)	(G,X)	NLV	110	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Mercury, Total	7439-97-6	2.0 (A)	0.0013	56 (S)	<0.20	<0.20	<0.025	<0.20	<0.20	<0.20	<0.025	<0.2	<0.20	<0.20	<0.025	<0.2	<0.20	<0.20	<0.025	<0.20
Nickel	7440-02-0	100 (A)	(G)	NLV	<20	<20	<20	<20	<20	<20	<20	<0.2	<20	<20	<20	<20	<20	<20	<20	<20
Selenium	7782-49-2	50 (A)	5	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	7440-22-4	98	0.2 (M); 0.06	NLV	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.36	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vanadium	7440-62-2	62	27	NLV	4.2	4.2	<4.0	<4.0	4.6	<4.0	4.6	7.4	9.3	<4.0	30	<4.0	<4.0	<4.0	<4.0	<4.0
Zinc	7440-66-6	5,000 (E)	(G)	NLV	<50	<50	<50	<50	<50	<50	<50	120	<50	<50	<50	<50	<50	<50	<50	<50
Mercury, Low Level Analysis	7439-97-6	2.0 (A)	0.0013	56 (S)	~	~	0.027	0.04	~	~	0.022	0.018	~	~	0.0056	0.026	~	~	0.00082	0.0013
Semi Volatile Organic Compounds																				
Acenaphthene	83-32-9	3,800	38	4,200 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acenaphthylene	208-96-8	150	ID	3,900 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Aniline	62-53-3	220	4.0 (M); 3.0	NLV	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Anthracene	120-12-7	43 (S)	ID	43 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Azobenzene	103-33-3	94	ID	6,400 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)anthracene (Q)	56-55-3	8.5	ID	NLV	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene (Q)	50-32-8	5.0 (A)	ID	NLV	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene (Q)	205-99-2	1.5 (S, AA)	ID	ID	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0 (M); 0.26 (S)	ID	NLV	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene (Q)	207-08-9	1.0 (M); 0.8 (S)	NA	NLV	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzyl alcohol	100-51-6	29,000	NA	NLV	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Bromophenyl Phenylether	101-55-3	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Butyl benzyl phthalate	85-68-7	2,700 (S)	67 (X)	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbazole	86-74-8	350	10 (M); 4.0	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chloro-3-methylphenol	59-50-7	420	7.4	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bis(2-chloroethoxy)methane	111-91-1	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Chloroethyl)ether (I)	111-44-4	8.3	1.0 (M); 0.79	210,000	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bis(2-chloroisopropyl) Ether	108-60-1	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
beta-Chloronaphthalene	91-58-7	5,200	NA	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorophenol	95-57-8	130	18	1,100,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorophenyl Phenylether	7005-72-3	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene (Q)	218-01-9	1.6 (S)	ID	ID	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenzo(a,h)anthracene (Q)	53-70-3	2.0 (M); 0.85	ID	NLV	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibenzofuran	132-64-9	ID	4.0	10,000 (S)	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2,4-Dichlorophenol	120-83-2	210	11	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl phthalate	84-66-2	16,000	110	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol	105-67-9	1,000	380	NLV	60	30	26	36	630	360	340	430	34	21	<5.0	20	<5.0	<5.0	<5.0	<5.0
Dimethyl phthalate	131-11-3	210,000	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-butyl phthalate	84-74-2	2,500	9.7	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dinitrophenol	51-28-5	-	-	-	<20	<100	<20	<20	<20	<20	<25	<20	<20	<20	<20	<20	<20	<20	<20	<20
2,4-Dinitrotoluene	121-14-2	32	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,6-Dinitrotoluene	606-20-2	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-octyl phthalate	117-84-0	380	ID	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	117-81-7	6.0 (A)	14	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Fluoranthene	206-44-0	210 (S)	1.6	210 (S)	1.2	<5.0	<1.0	1.1	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	2,000 (S)	12	2,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobenzene (C-66)	118-74-1	1.0 (A)	0.2 (M); 0.0003	3,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene (C-46)	87-68-3	42	0.053	3,200 (S)	<5.0	<25	~	~	<5.0	<5.0	~	~	<5.0	<5.0	~	~	<5.0	<5.0	~	~
Hexachlorocyclopentadiene (C-56)	77-47-4	50 (A)	ID	420	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	2.0 (M); 0.022 (S)	ID	NLV	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Isophorone	78-59-1	3,100	1,300 (X)	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methyl-4,6-dinitrophenol	534-52-1	20 (M); 7.3	NA	NLV	<20	<50	<20	<20	<20	<20	<25	<20	<20	<20	<20	<20	<20	<20	<20	<20
2-Methylnaphthalene	91-57-6	750	19	25,000 (S)	15	14	15	12	<5.0	<15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 2-	95-48-7	-	82	-	<5.0	<5.0	<5.0	<5.0	10	10	8	8.8	6.6	6.3	<5.0	5.9	<5.0	<5.0	<5.0	<5.0
Methylphenol, 3- and 4-	MEPH1314	-	25	-	<10	<10	<10	<10	70	98	95	78	29	30	<10	28	<10	<10	<10	<10
2-Nitroaniline	88-74-4	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
3-Nitroaniline	99-09-2	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
4-Nitroaniline	100-01-6	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Nitrobenzene (I)	98-95-3	9.6	180 (X)	550,000	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
2-Nitrophenol	88-75-5	58	ID	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Nitrophenol	100-02-7	-	-	-	<20	<25	<20	<20	<20	<20	<25	<20	<20	<20	<20	<20	<20	<20	<20	<20
N-Nitrosodimethylamine	62-75-9	-	-	-	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Nitroso-di-n-propylamine	621-64-7	5.0 (M); 0.77	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-Nitrosodiphenylamine	86-30-6	1,100	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pentachlorophenol	87-86-5	1.0 (A)	(G,X)	NLV	<20	<100	<20	<20	<20	<20	<25	<20	<20	<20	<20	<20	<20	<20	<20	<20
Phenanthrene	85-01-8	150	2.0 (M); 1.7	1,000 (S)	4.7	<5.0	4.4	5.2	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Phenol	108-95-2	13,000	450	NLV	7.3	9.6	5.7	6.3	<5.0	<5.0	<5.0	<5.0	30	36	<5.0	17	<5.0	<5.0	<5.0	<5.0
Pyrene	129-00-0	140 (S)	ID	140 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyridine (I)	110-86-1	21	NA	12,000	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,5-Trichlorophenol	95-95-4	2,100	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,6-Trichlorophenol	88-06-2	470	5.0	NLV	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5 (A)	0.2 (M); 2.5E-5	45 (S)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	MW-103				MW-104				MW-105				MW-106			
					MW-103-121219	MW-103-031920	MW-103-052720	MW-103-073020	MW-104-121119	MW-104-031820	MW-104-052720	MW-104-073020	MW-105-121119	MW-105-031820	MW-105-052820	MW-105-073020	MW-106-121019	MW-106-031920	MW-106-052820	MW-106-073020
					12/12/2019	3/19/2020	5/27/2020	7/30/2020	12/11/2019	3/18/2020	5/27/2020	7/30/2020	12/11/2019	3/18/2020	5/28/2020	7/30/2020	12/10/2019	3/19/2020	5/28/2020	7/30/2020
Volatile Organic Compounds																				
Acetone (I)	67-64-1	2,100	1,700	1,000,000,000 (D,S)	<50	<50	<50	<200	<50	<50	<50	<200	<50	<50	<50	<50	<50	<50	<50	<200
Acrylonitrile (I)	107-13-1	11	2.0 (M); 1.2	190,000	<2.0	<2.0	<10	<40	<5.0	<5.0	<20	<40	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<40
Benzene (I)	71-43-2	5.0 (A)	200 (X)	35,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	1.1	1.1	<1.0	1.1	<2.5	<1.0	<1.0	<10
Bromobenzene (I)	108-86-1	50	NA	390,000	<1.0	<1.0	<2.5	<10	<5.0	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
Bromochloromethane	74-97-5	-	-	-	<1.0	<1.0	<5.0	<20	<2.5	<2.5	<10	<20	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<20
Bromodichloromethane	75-27-4	80 (A,W)	ID	37,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
Bromoform	75-25-2	80 (A,W)	ID	3,100,000 (S)	<1.0	<1.0	<5.0	<20	<5.0	<5.0	<10	<20	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<20
Bromomethane	74-83-9	29	5.0 (M); 4.2	9,000	<5.0	<5.0	<25	<100	<10	<10	<50	<100	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<100
2-Butanone (MEK) (I)	78-93-3	38,000	2,200	240,000,000 (S)	<25	<25	<25	<40	<25	<25	<50	<40	<25	<25	<25	<25	<25	<25	<25	<40
n-Butylbenzene	104-51-8	230	ID	ID	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
sec-Butylbenzene	135-98-8	230	ID	ID	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
tert-Butylbenzene (I)	98-06-6	230	ID	ID	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Carbon disulfide (I,R)	75-15-0	2,300	ID	550,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<10	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
Carbon tetrachloride	56-23-5	5.0 (A)	38 (X)	2,400	<1.0	<1.0	<2.5	<10	<5.0	<5.0	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
Chlorobenzene (I)	108-90-7	100 (A)	25	470,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
Chloroethane	75-00-3	1,700	1,100 (X)	5,700,000 (S)	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<10	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<40
Chloroform	67-66-3	80 (A,W)	350	180,000	<1.0	<1.0	<2.5	<10	<5.0	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Chloromethane (I)	74-87-3	1,100	ID	45,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<10	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
o-Chlorotoluene (I)	95-49-8	420	ID	370,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Dibromochloromethane	124-48-1	80 (A,W)	ID	110,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<10	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
Dibromochloropropane	96-12-8	0.2 (A)	ID	1,200 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
Dibromomethane	74-95-3	230	NA	ID	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
1,2-Dichlorobenzene	95-50-1	600 (A)	13	160,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
1,3-Dichlorobenzene	541-73-1	19	28	41,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
1,4-Dichlorobenzene	106-46-7	75 (A)	17	74,000 (S)	<1.0	<1.0	<5.0	<20	<2.5	<2.5	<10	<20	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<20
Dichlorodifluoromethane	75-71-8	4,800	ID	300,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
1,1-Dichloroethane	75-34-3	2,500	740	2,300,000	4.7	3.7	<2.5	<10	15	21	27	17	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
1,2-Dichloroethane (I)	107-06-2	5.0 (A)	360 (X)	59,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
cis-1,2-Dichloroethylene	156-59-2	70 (A)	620	210,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
trans-1,2-Dichloroethylene	156-60-5	100 (A)	1,500 (X)	200,000	<1.0	<1.0	<2.5	<20	<2.5	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<20
1,1-Dichloroethylene (I)	75-35-4	7.0 (A)	130	1,300	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
1,2-Dichloropropane (I)	78-87-5	5.0 (A)	230 (X)	36,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
cis-1,3-Dichloropropylene	10061-01-5	-	-	-	<0.50	<0.50	<2.5	<10	<2.5	<2.5	<5.0	<10	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<10
trans-1,3-Dichloropropylene	10061-02-6	-	-	-	<0.50	<0.50	<2.5	<10	<2.5	<2.5	<5.0	<10	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<0.50	<10
Ethylbenzene (I)	100-41-4	74 (E)	18	170,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Ethylene dibromide	106-93-4	0.05 (A)	5.7 (X)	15,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	2,900	ID	8,700,000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Isopropyl benzene	98-82-8	2,300	28	56,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	5,200	ID	20,000,000 (S)	<50	<50	<50	<100	<50	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<100
Methylene chloride	75-09-2	5.0 (A)	1,500 (X)	1,400,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
Methyl-tert-butyl ether (MTBE)	1634-04-4	40 (E)	7,100 (X)	47,000,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Naphthalene	91-20-3	1,500	11	31,000 (S)	52	18	18	22	<5.0	<5.0	<10	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
n-Propylbenzene (I)	103-65-1	230	ID	ID	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Styrene	100-42-5	100 (A)	80 (X)	310,000 (S)	<1.0	<1.0	<5.0	<20	<2.5	<2.5	<10	<20	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<20
1,1,1,2-Tetrachloroethane	630-20-6	320	ID	96,000	<1.0	<1.0	<5.0	<20	<2.5	<2.5	<10	<20	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<20
1,1,2,2-Tetrachloroethane	79-34-5	35	78 (X)	77,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
Tetrachloroethylene	127-18-4	5.0 (A)	60 (X)	170,000	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Toluene (I)	108-88-3	790 (E)	270	530,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	4.7	4.7	<1.0	5.8	<2.5	<1.0	<1.0	<10
1,2,4-Trichlorobenzene	120-82-1	70 (A)	99 (X)	300,000 (S)	<5.0	<25	<5.0	<20	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
1,1,1-Trichloroethane	71-55-6	200 (A)	89	1,300,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
1,1,2-Trichloroethane	79-00-5	5.0 (A)	330 (X)	110,000	<1.0	<1.0	<5.0	<20	<2.5	<2.5	<10	<20	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<20
Trichloroethylene	79-01-6	5.0 (A)	200 (X)	4,900	1.1	1	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Trichlorofluoromethane	75-69-4	7,300	NA	1,100,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<2.0	<5.0	<1.0	<1.0	<10
1,2,3-Trichloropropane	96-18-4	120	NA	18,000	<1.0	<1.0	<5.0	<20	<5.0	<2.5	<10	<20	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<20
1,2,3-Trimethylbenzene	526-73-8	-	-	-	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
1,2,4-Trimethylbenzene	95-63-6	63 (E)	17	56,000 (S)	1.4	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
1,3,5-Trimethylbenzene	108-67-8	72 (E)	45	61,000 (S)	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Vinyl chloride	75-01-4	2.0 (A)	13 (X)	13,000	<1.0	<1.0	<2.5	<10	<5.0	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<10
m&p-Xylene	136777-61-2	-	-	-	<2.0	<2.0	<5.0	<20	<5.0	<5.0	<10	<20	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<20
o-Xylene	95-47-6	-	-	-	<1.0	<1.0	<2.5	<10	<2.5	<2.5	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<2.5	<1.0	<1.0	<10
Xylenes	1330-20-7	280 (E)	49	190,000 (S)	<3.0	<3.0	<7.5	<30	<7.5	<7.5	<15	<30	<3.0	<3.0	<3.0	<3.0	<7.5	<3.0	<3.0	<30
Ammonia	7664-41-7	10,000 (N)	(CC)	7,100,000	4,100	2,500	2,800	3,600	24,000	19,000	19,000	16,000	8,000	3,900	830	5,500	2,000	990	1,000	2,200
Chloride	16887-00-6	250,000 (E)	50,000	NLV	25,000	25,000	24,000	22,000	300,000	310,000	220,000	240,000	40,000	24,000	<10,000	29,000	43,000	38,000	37,000	47,000
Total dissolved solids	TDS	500,000 (E)	500,000	ID	1,500,000	1,500,000	1,600,000	1,400,000	860,000	920,000	800,000	860,000	610,000	620,000	450,000	690,000	1,500,000	1,300,000	1,300,000	1,500,000
pH	PH	6.5 to 8.5 (E)	6.5 to 9.0	ID	12.4	12.4	12.4	12.4	11	11	10.9	11	11.7	11.9	11.2	11.9	12.5	12.4	12.3	12.4

Notes:
(1) "CAS Number - Chemical Abstract Number
(2) "µg/L" - micrograms per liter or parts per billion
(3) - "S.U." - standard units
(4) - Samples collected from TMW-27 were labeled as "TMW-26".
"-" - No standard
*Per R299.44, June 25, 2018
~ Parameter not tested for at his location.
ID-Insufficient data to develop criterion.
NA-Not available.
NLV-Hazardous substance is not likely to volatilize under most conditions.
A-Criterion is the State of Michigan drinking water standard established pursuant to Section 5.
D-Calculate criterion exceeds 100%, hence it is reduced to 100% or 1.0e+9 ppb.
E-Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the act.
G-Groundwater Surface Water Interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
L-Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10)
of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.
M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
N-The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitriteN, nitrate-N) in groundwater that is used as a source of drinking water
S-Criterion defaults to the hazardous substance-specific water solubility limit.
W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan
drinking water standard of 100 ug/L.
X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria tables is not protective
for surface water that is used as drinking water source.
AA-Comparison of these criteria may take into account an evaluation of whether the hazardous substances are adsorbed
to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.
CC-The generic GSI criteria are based on the toxicity of unionized ammonia.

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	MW-107s				MW-107D				MW-108				MW-109D			
					MW-107S-121219	MW-107S-031920	MW-107s-052720	MW-107S-073020	MW-107D-121219	MW107D-031920	MW-107D-052720	MW-107D-073020	MW-108-121219	MW-108-031920	MW-108-052820	MW-108-073120	MW-109D-121219	MW-109D-031820	MW-109D-052820	MW-109D-073020
					12/12/2019	3/19/2020	5/27/2020	7/30/2020	12/12/2019	3/19/2020	5/27/2020	7/30/2020	12/12/2019	3/19/2020	5/28/2020	7/31/2020	12/12/2019	3/18/2020	5/28/2020	7/30/2020
Metals																				
Arsenic	7440-38-2	10 (A)	10	NLV	6.4	<5.0	<5.0	5.9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	7440-39-3	2,000 (A)	(G)	NLV	<100	<100	<100	<100	<100	<100	<100	<100	390	330	380	340	490	520	500	510
Chromium, Total	7440-47-3	100 (A)	11	NLV	<10	<10	<10	<10	<10	<10	<10	<10	19	26	29	19	<10	<10	<10	<10
Copper	7440-50-8	1,000 (E)	(G)	NLV	<4.0	<4.0	<4.0	<4.0	<4.0	4.9	<4.0	<4.0	10	78	13	27	<4.0	<4.0	<4.0	<4.0
Lead	7439-92-1	4.0 (L)	(G,X)	NLV	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	15	72	46	64	<3.0	<3.0	<3.0	<3.0
Manganese	7439-96-5	50 (E)	(G,X)	NLV	<50	<50	<50	<50	<50	79	<50	<50	<50	<50	<50	<50	<50	120	<50	<50
Mercury, Total	7439-97-6	2.0 (A)	0.0013	56 (S)	<0.20	<0.20	0.049	<0.20	<0.20	<0.20	<0.025	<0.20	<0.20	<0.20	0.113	<0.20	<0.20	<0.20	0.114	<0.20
Nickel	7440-02-0	100 (A)	(G)	NLV	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Selenium	7782-49-2	50 (A)	5	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	7440-22-4	98	0.2 (M); 0.06	NLV	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vanadium	7440-62-2	62	27	NLV	4.9	<4.0	4.1	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Zinc	7440-66-6	5,000 (E)	(G)	NLV	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	93	<50	<50	160	<50
Mercury, Low Level Analysis	7439-97-6	2.0 (A)	0.0013	56 (S)	~	~	0.047	0.038	~	~	<0.00050	0.00097	~	~	0.00078	0.0032	~	~	0.0012	0.0021
Semi Volatile Organic Compounds																				
Acenaphthene	83-32-9	3,800	38	4,200 (S)	<5.0	5.6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acenaphthylene	208-96-8	150	ID	3,900 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Aniline	62-53-3	220	4.0 (M); 3.0	NLV	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Anthracene	120-12-7	43 (S)	ID	43 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Azobenzene	103-33-3	94	ID	6,400 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)anthracene (Q)	56-55-3	8.5	ID	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene (Q)	50-32-8	5.0 (A)	ID	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene (Q)	205-99-2	1.5 (S, AA)	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0 (M); 0.26 (S)	ID	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene (Q)	207-08-9	1.0 (M); 0.8 (S)	NA	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzyl alcohol	100-51-6	29,000	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Bromophenyl Phenylether	101-55-3	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Butyl benzyl phthalate	85-68-7	2,700 (S)	67 (X)	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbazole	86-74-8	350	10 (M); 4.0	NLV	<5.0	5.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chloro-3-methylphenol	59-50-7	420	7.4	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bis(2-chloroethoxy)methane	111-91-1	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Chloroethyl)ether (I)	111-44-4	8.3	1.0 (M); 0.79	210,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bis(2-chloroisopropyl) Ether	108-60-1	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
beta-Chloronaphthalene	91-58-7	5,200	NA	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorophenol	95-57-8	130	18	1,100,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorophenyl Phenylether	7005-72-3	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene (Q)	218-01-9	1.6 (S)	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenzo(a,h)anthracene (Q)	53-70-3	2.0 (M); 0.85	ID	NLV	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibenzofuran	132-64-9	ID	4.0	10,000 (S)	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2,4-Dichlorophenol	120-83-2	210	11	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl phthalate	84-66-2	16,000	110	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol	105-67-9	1,000	380	NLV	180	140	59	170	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dimethyl phthalate	131-11-3	210,000	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-butyl phthalate	84-74-2	2,500	9.7	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dinitrophenol	51-28-5	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
2,4-Dinitrotoluene	121-14-2	32	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,6-Dinitrotoluene	606-20-2	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-octyl phthalate	117-84-0	380	ID	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	117-81-7	6.0 (A)	14	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Fluoranthene	206-44-0	210 (S)	1.6	210 (S)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	2,000 (S)	12	2,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobenzene (C-66)	118-74-1	1.0 (A)	0.2 (M); 0.0003	3,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene (C-46)	87-68-3	42	0.053	3,200 (S)	<5.0	<5.0	~	~	<5.0	<5.0	~	~	<5.0	<5.0	~	~	<5.0	<5.0	~	~
Hexachlorocyclopentadiene (C-56)	77-47-4	50 (A)	ID	420	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	2.0 (M); 0.022 (S)	ID	NLV	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Isophorone	78-59-1	3,100	1,300 (X)	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methyl-4,6-dinitrophenol	534-52-1	20 (M); 7.3	NA	NLV	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
2-Methylnaphthalene	91-57-6	750	19	25,000 (S)	5.4	8.9	6.7	9.1	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 2-	95-48-7	-	82	-	8.3	7.2	<5.0	6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 3- and 4-	MEPH1314	-	25	-	110	83	30	69	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	88-74-4	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
3-Nitroaniline	99-09-2	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
4-Nitroaniline	100-01-6	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Nitrobenzene (I)	98-95-3	9.6	180 (X)	550,000	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
2-Nitrophenol	88-75-5	58	ID	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Nitrophenol	100-02-7	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
N-Nitrosodimethylamine	62-75-9	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
n-Nitroso-di-n-propylamine	621-64-7	5.0 (M); 0.77	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-Nitrosodiphenylamine	86-30-6	1,100	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pentachlorophenol	87-86-5	1.0 (A)	(G,X)	NLV	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Phenanthrene	85-01-8	150	2.0 (M); 1.7	1,000 (S)	<2.0	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.2	2.3	3.3	2.7
Phenol	108-95-2	13,000	450	NLV	24	37	9.3	19	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyrene	129-00-0	140 (S)	ID	140 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyridine (I)	110-86-1	21	NA	12,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,5-Trichlorophenol	95-95-4	2,100	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,6-Trichlorophenol	88-06-2	470	5.0	NLV	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5 (A)	0.2 (M); 2.5E-5	45 (S)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	MW-107s				MW-107D				MW-108				MW-109D			
					MW-107S-121219	MW-107S-031920	MW-107s-052720	MW-107S-073020	MW-107D-121219	MW107D-031920	MW-107D-052720	MW-107D-073020	MW-108-121219	MW-108-031920	MW-108-052820	MW-108-073120	MW-109D-121219	MW-109D-031820	MW-109D-052820	MW-109D-073020
					12/12/2019	3/19/2020	5/27/2020	7/30/2020	12/12/2019	3/19/2020	5/27/2020	7/30/2020	12/12/2019	3/19/2020	5/28/2020	7/31/2020	12/12/2019	3/18/2020	5/28/2020	7/30/2020
Volatile Organic Compounds																				
Acetone (I)	67-64-1	2,100	1,700	1,000,000,000 (D,S)	<50	<50	<50	<200	<50	<50	<50	<50	<50	<50	<50	<200	<50	<50	<50	<200
Acrylonitrile (I)	107-13-1	11	2.0 (M); 1.2	190,000	<2.0	<2.0	<2.0	<40	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<40	<5.0	<5.0	<10	<40
Benzene (I)	71-43-2	5.0 (A)	200 (X)	35,000	1.6	1.7	1.4	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Bromobenzene (I)	108-86-1	50	NA	390,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<2.5	<2.5	<10
Bromochloromethane	74-97-5	-	-	-	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20
Bromodichloromethane	75-27-4	80 (A,W)	ID	37,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Bromoform	75-25-2	80 (A,W)	ID	3,100,000 (S)	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<5.0	<5.0	<5.0	<20
Bromomethane	74-83-9	29	5.0 (M); 4.2	9,000	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<100	<10	<10	<25	<100
2-Butanone (MEK) (I)	78-93-3	38,000	2,200	240,000,000 (S)	<25	<25	<25	<40	<25	<25	<25	<25	<25	<25	<25	<40	<25	<25	<25	<40
n-Butylbenzene	104-51-8	230	ID	ID	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
sec-Butylbenzene	135-98-8	230	ID	ID	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
tert-Butylbenzene (I)	98-06-6	230	ID	ID	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Carbon disulfide (I,R)	75-15-0	2,300	ID	550,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
Carbon tetrachloride	56-23-5	5.0 (A)	38 (X)	2,400	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<5.0	<2.5	<10
Chlorobenzene (I)	108-90-7	100 (A)	25	470,000 (S)	1	1.1	1.4	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Chloroethane	75-00-3	1,700	1,100 (X)	5,700,000 (S)	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<5.0	<40
Chloroform	67-66-3	80 (A,W)	350	180,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<2.5	<2.5	<10
Chloromethane (I)	74-87-3	1,100	ID	45,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
o-Chlorotoluene (I)	95-49-8	420	ID	370,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
Dibromochloromethane	124-48-1	80 (A,W)	ID	110,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
Dibromochloropropane	96-12-8	0.2 (A)	ID	1,200 (S)	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Dibromomethane	74-95-3	230	NA	ID	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
1,2-Dichlorobenzene	95-50-1	600 (A)	13	160,000 (S)	4.3	4.5	7.6	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,3-Dichlorobenzene	541-73-1	19	28	41,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,4-Dichlorobenzene	106-46-7	75 (A)	17	74,000 (S)	<1.0	<1.0	1.3	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20
Dichlorodifluoromethane	75-71-8	4,800	ID	300,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
1,1-Dichloroethane	75-34-3	2,500	740	2,300,000	3.2	4.4	3.1	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,2-Dichloroethane (I)	107-06-2	5.0 (A)	360 (X)	59,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
cis-1,2-Dichloroethylene	156-59-2	70 (A)	620	210,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
trans-1,2-Dichloroethylene	156-60-5	100 (A)	1,500 (X)	200,000	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<2.5	<20
1,1-Dichloroethylene (I)	75-35-4	7.0 (A)	130	1,300	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,2-Dichloropropane (I)	78-87-5	5.0 (A)	230 (X)	36,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
cis-1,3-Dichloropropylene	10061-01-5	-	-	-	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<2.5	<2.5	<2.5	<10
trans-1,3-Dichloropropylene	10061-02-6	-	-	-	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10	<2.5	<2.5	<2.5	<10
Ethylbenzene (I)	100-41-4	74 (E)	18	170,000 (S)	<1.0	1.1	1.1	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Ethylene dibromide	106-93-4	0.05 (A)	5.7 (X)	15,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	2,900	ID	8,700,000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Isopropyl benzene	98-82-8	2,300	28	56,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	5,200	ID	20,000,000 (S)	<50	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<100	<50	<50	<50	<100
Methylene chloride	75-09-2	5.0 (A)	1,500 (X)	1,400,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
Methyl-tert-butyl ether (MTBE)	1634-04-4	40 (E)	7,100 (X)	47,000,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
Naphthalene	91-20-3	1,500	11	31,000 (S)	110	140	120	96	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
n-Propylbenzene (I)	103-65-1	230	ID	ID	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Styrene	100-42-5	100 (A)	80 (X)	310,000 (S)	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20
1,1,1,2-Tetrachloroethane	630-20-6	320	ID	96,000	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20
1,1,2,2-Tetrachloroethane	79-34-5	35	78 (X)	77,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Tetrachloroethylene	127-18-4	5.0 (A)	60 (X)	170,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Toluene (I)	108-88-3	790 (E)	270	530,000 (S)	3.1	3.4	3.2	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,2,4-Trichlorobenzene	120-82-1	70 (A)	99 (X)	300,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
1,1,1-Trichloroethane	71-55-6	200 (A)	89	1,300,000 (S)	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,1,2-Trichloroethane	79-00-5	5.0 (A)	330 (X)	110,000	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20
Trichloroethylene	79-01-6	5.0 (A)	200 (X)	4,900	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Trichlorofluoromethane	75-69-4	7,300	NA	1,100,000 (S)	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,2,3-Trichloropropane	96-18-4	120	NA	18,000	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<5.0	<2.5	<5.0	<20
1,2,3-Trimethylbenzene	526-73-8	-	-	-	4.6	4.9	5.4	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,2,4-Trimethylbenzene	95-63-6	63 (E)	17	56,000 (S)	3.8	4.2	4.3	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
1,3,5-Trimethylbenzene	108-67-8	72 (E)	45	61,000 (S)	1.4	1.6	1.5	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10
Vinyl chloride	75-01-4	2.0 (A)	13 (X)	13,000	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<5.0	<2.5	<2.5	<10
m&p-Xylene	136777-61-2	-	-	-	3	3.3	3.2	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	5.6	6.3	6.9	<20
o-Xylene	95-47-6	-	-	-	2.9	3.1	2.9	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<2.5	2.8	2.9	<10
Xylenes	1330-20-7	280 (E)	49	190,000 (S)	5.9	6.4	6	<30	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<30	<7.5	9.1	9.8	<30
Ammonia	7664-41-7	10,000 (N)	(CC)	7,100,000	13,000	11,000	8,400	11,000	560	430	480	32	2,000	1,500	1,500	1,800	3,600	2,900	3,400	3,700
Chloride	16887-00-6	250,000 (E)	50,000	NLV	24,000	28,000	21,000	24,000	22,000	24,000	24,000	27,000	27,000	28,000	28,000	26,000	30,000	32,000	32,000	30,000
Total dissolved solids	TDS	500,000 (E)	500,000	ID	670,000	840,000	810,000	730,000	360,000	380,000	350,000	390,000	1,200,000	1,200,000	1,300,000	1,100,000	2,000,000	2,000,000	1,900,000	2,000,000
pH	PH	6.5 to 8.5 (E)	6.5 to 9.0	ID	12	12.1	12.1	12	8.54	8.12	8.06	8.02	12.4	12.3	12.3	12.3	12.6	12.6	12.5	12.5

Notes:
(1) "CAS Number - Chemical Abstract Number
(2) "µg/L" - micrograms per liter or parts per billion
(3) - "S.U." - standard units
(4) - Samples collected from TMW-27 were labeled as "TMW-26".
"-" - No standard
*Per R299.44, June 25, 2018
~ Parameter not tested for at his location.
ID-Insufficient data to develop criterion.
NA-Not available.
NLV-Hazardous substance is not likely to volatilize under most conditions.
A-Criterion is the State of Michigan drinking water standard established pursuant to Section 5.
D-Calculate criterion exceeds 100%, hence it is reduced to 100% or 1.0e+9 ppb.
E-Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the act.
G-Groundwater Surface Water Interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
L-Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10)
of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.
M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
N-The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitriteN, nitrate-N) in groundwater that is used as a source of drinking water
S-Criterion defaults to the hazardous substance-specific water solubility limit.
W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan
drinking water standard of 100 ug/L.
X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria tables is not protective
for surface water that is used as drinking water source.
AA-Comparison of these criteria may take into account an evaluation of whether the hazardous substances are adsorbed
to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.
CC-The generic GSI criteria are based on the toxicity of unionized ammonia.

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	MW-110s				MW-110D				TMW-27[4]			
					MW-110S-121219	MW-110S-031920	MW-110s-052820	MW-110S-073120	MW-110D-121219	MW-110D-031920	MW-110D-052820	MW-110D-073120	TMW-26-121219	TMW-26-031820	TMW-26-052720	TMW-26-073020
					12/12/2019	3/19/2020	5/28/2020	7/31/2020	12/12/2019	3/19/2020	5/28/2020	7/31/2020	12/12/2019	3/18/2020	5/27/2020	7/30/2020
Metals																
Arsenic	7440-38-2	10 (A)	10	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Barium	7440-39-3	2,000 (A)	(G)	NLV	290	310	330	390	520	510	540	530	140	<100	<100	<100
Chromium, Total	7440-47-3	100 (A)	11	NLV	45	48	52	52	16	17	32	34	33	20	22	14
Copper	7440-50-8	1,000 (E)	(G)	NLV	4.2	5.6	<4.0	5.9	4	4.5	9.4	5.8	12	9.4	11	11
Lead	7439-92-1	4.0 (L)	(G,X)	NLV	<3.0	<3.0	<3.0	<3.0	<3.0	7.2	14	10	<3.0	<3.0	<3.0	<3.0
Manganese	7439-96-5	50 (E)	(G,X)	NLV	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Mercury, Total	7439-97-6	2.0 (A)	0.0013	56 (S)	<0.20	<0.20	0.103	<0.20	<0.20	<0.20	0.105	<0.20	<0.20	<0.20	0.031	<0.20
Nickel	7440-02-0	100 (A)	(G)	NLV	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Selenium	7782-49-2	50 (A)	5	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	7440-22-4	98	0.2 (M); 0.06	NLV	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vanadium	7440-62-2	62	27	NLV	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.1	9.1	14
Zinc	7440-66-6	5,000 (E)	(G)	NLV	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Mercury, Low Level Analysis	7439-97-6	2.0 (A)	0.0013	56 (S)	~	~	0.00069	0.00090	~	~	0.0018	0.0036	~	~	0.020	0.03
Semi Volatile Organic Compounds																
Acenaphthene	83-32-9	3,800	38	4,200 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Acenaphthylene	208-96-8	150	ID	3,900 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Aniline	62-53-3	220	4.0 (M); 3.0	NLV	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0
Anthracene	120-12-7	43 (S)	ID	43 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Azobenzene	103-33-3	94	ID	6,400 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)anthracene (Q)	56-55-3	8.5	ID	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene (Q)	50-32-8	5.0 (A)	ID	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene (Q)	205-99-2	1.5 (S, AA)	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0 (M); 0.26 (S)	ID	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene (Q)	207-08-9	1.0 (M); 0.8 (S)	NA	NLV	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Benzyl alcohol	100-51-6	29,000	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0
4-Bromophenyl Phenylether	101-55-3	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Butyl benzyl phthalate	85-68-7	2,700 (S)	67 (X)	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Carbazole	86-74-8	350	10 (M); 4.0	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chloro-3-methylphenol	59-50-7	420	7.4	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bis(2-chloroethoxy)methane	111-91-1	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Chloroethyl)ether (I)	111-44-4	8.3	1.0 (M); 0.79	210,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
Bis(2-chloroisopropyl) Ether	108-60-1	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
beta-Chloronaphthalene	91-58-7	5,200	NA	ID	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorophenol	95-57-8	130	18	1,100,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Chlorophenyl Phenylether	7005-72-3	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene (Q)	218-01-9	1.6 (S)	ID	ID	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenzo(a,h)anthracene (Q)	53-70-3	2.0 (M); 0.85	ID	NLV	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
Dibenzofuran	132-64-9	ID	4.0	10,000 (S)	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<5.0
2,4-Dichlorophenol	120-83-2	210	11	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Diethyl phthalate	84-66-2	16,000	110	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol	105-67-9	1,000	380	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Dimethyl phthalate	131-11-3	210,000	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-butyl phthalate	84-74-2	2,500	9.7	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4-Dinitrophenol	51-28-5	-	-	-	<20	<20	<20	<20	<20	<20	<20	<100	<20	<20	<20	<100
2,4-Dinitrotoluene	121-14-2	32	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,6-Dinitrotoluene	606-20-2	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-octyl phthalate	117-84-0	380	ID	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	117-81-7	6.0 (A)	14	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Fluoranthene	206-44-0	210 (S)	1.6	210 (S)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0
Fluorene	86-73-7	2,000 (S)	12	2,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobenzene (C-66)	118-74-1	1.0 (A)	0.2 (M); 0.0003	3,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobutadiene (C-46)	87-68-3	42	0.053	3,200 (S)	<5.0	<5.0	~	~	<5.0	<5.0	~	~	<5.0	<5.0	~	~
Hexachlorocyclopentadiene (C-56)	77-47-4	50 (A)	ID	420	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<25
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0
Indeno(1,2,3-cd)pyrene (Q)	193-39-5	2.0 (M); 0.022 (S)	ID	NLV	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0
Isophorone	78-59-1	3,100	1,300 (X)	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methyl-4,6-dinitrophenol	534-52-1	20 (M); 7.3	NA	NLV	<20	<20	<20	<20	<20	<20	<20	<25	<20	<20	<20	<25
2-Methylnaphthalene	91-57-6	750	19	25,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 2-	95-48-7	-	82	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylphenol, 3- and 4-	MEPH1314	-	25	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	88-74-4	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
3-Nitroaniline	99-09-2	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
4-Nitroaniline	100-01-6	-	-	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Nitrobenzene (I)	98-95-3	9.6	180 (X)	550,000	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0
2-Nitrophenol	88-75-5	58	ID	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
4-Nitrophenol	100-02-7	-	-	-	<20	<20	<20	<20	<20	<20	<20	<25	<20	<20	<20	<25
N-Nitrosodimethylamine	62-75-9	-	-	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0
n-Nitroso-di-n-propylamine	621-64-7	5.0 (M); 0.77	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
N-Nitrosodiphenylamine	86-30-6	1,100	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pentachlorophenol	87-86-5	1.0 (A)	(G,X)	NLV	<20	<20	<20	<20	<20	<20	<20	<25	<20	<20	<20	<25
Phenanthrene	85-01-8	150	2.0 (M); 1.7	1,000 (S)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0	<2.0	<5.0
Phenol	108-95-2	13,000	450	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyrene	129-00-0	140 (S)	ID	140 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Pyridine (I)	110-86-1	21	NA	12,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0
2,4,5-Trichlorophenol	95-95-4	2,100	NA	NLV	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2,4,6-Trichlorophenol	88-06-2	470	5.0	NLV	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<5.0
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5 (A)	0.2 (M); 2.5E-5	45 (S)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Table 4
Summary of Groundwater Analytical Results
RTRR - Riverview
18251 W. Jefferson, Riverview, MI
ASTI Project No. 10860

Parameters	CAS Number[1]	Nonresidential Drinking Water Criteria*	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria*	MW-110s				MW-110D				TMW-27[4]			
					MW-110S-121219	MW-110S-031920	MW-110s-052820	MW-110S-073120	MW-110D-121219	MW-110D-031920	MW-110D-052820	MW-110D-073120	TMW-26-121219	TMW-26-031820	TMW-26-052720	TMW-26-073020
					12/12/2019	3/19/2020	5/28/2020	7/31/2020	12/12/2019	3/19/2020	5/28/2020	7/31/2020	12/12/2019	3/18/2020	5/27/2020	7/30/2020
Volatile Organic Compounds																
Acetone (I)	67-64-1	2,100	1,700	1,000,000,000 (D,S)	<50	<50	<50	<200	<50	<50	<50	<200	<50	<50	<50	<200
Acrylonitrile (I)	107-13-1	11	2.0 (M); 1.2	190,000	<2.0	<2.0	<2.0	<40	<5.0	<5.0	<10	<40	<2.0	<2.0	<2.0	<40
Benzene (I)	71-43-2	5.0 (A)	200 (X)	35,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Bromobenzene (I)	108-86-1	50	NA	390,000	<1.0	<1.0	<1.0	<10	<5.0	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Bromochloromethane	74-97-5	-	-	-	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<20
Bromodichloromethane	75-27-4	80 (A,W)	ID	37,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Bromoform	75-25-2	80 (A,W)	ID	3,100,000 (S)	<1.0	<1.0	<1.0	<20	<5.0	<5.0	<5.0	<20	<1.0	<1.0	<1.0	<20
Bromomethane	74-83-9	29	5.0 (M); 4.2	9,000	<5.0	<5.0	<5.0	<100	<10	<10	<25	<100	<5.0	<5.0	<5.0	<100
2-Butanone (MEK) (I)	78-93-3	38,000	2,200	240,000,000 (S)	<25	<25	<25	<40	<25	<25	<25	<40	<25	<25	<25	<40
n-Butylbenzene	104-51-8	230	ID	ID	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
sec-Butylbenzene	135-98-8	230	ID	ID	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
tert-Butylbenzene (I)	98-06-6	230	ID	ID	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Carbon disulfide (I,R)	75-15-0	2,300	ID	550,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
Carbon tetrachloride	56-23-5	5.0 (A)	38 (X)	2,400	<1.0	<1.0	<1.0	<10	<5.0	<5.0	<2.5	<10	<1.0	<1.0	<1.0	<10
Chlorobenzene (I)	108-90-7	100 (A)	25	470,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Chloroethane	75-00-3	1,700	1,100 (X)	5,700,000 (S)	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<5.0	<40	<5.0	<5.0	<5.0	<40
Chloroform	67-66-3	80 (A,W)	350	180,000	<1.0	<1.0	<1.0	<10	<5.0	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Chloromethane (I)	74-87-3	1,100	ID	45,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
o-Chlorotoluene (I)	95-49-8	420	ID	370,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
Dibromochloromethane	124-48-1	80 (A,W)	ID	110,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
Dibromochloropropane	96-12-8	0.2 (A)	ID	1,200 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Dibromomethane	74-95-3	230	NA	ID	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
1,2-Dichlorobenzene	95-50-1	600 (A)	13	160,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,3-Dichlorobenzene	541-73-1	19	28	41,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,4-Dichlorobenzene	106-46-7	75 (A)	17	74,000 (S)	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<20
Dichlorodifluoromethane	75-71-8	4,800	ID	300,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
1,1-Dichloroethane	75-34-3	2,500	740	2,300,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,2-Dichloroethane (I)	107-06-2	5.0 (A)	360 (X)	59,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
cis-1,2-Dichloroethylene	156-59-2	70 (A)	620	210,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
trans-1,2-Dichloroethylene	156-60-5	100 (A)	1,500 (X)	200,000	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<2.5	<20	<1.0	<1.0	<1.0	<20
1,1-Dichloroethylene (I)	75-35-4	7.0 (A)	130	1,300	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,2-Dichloropropane (I)	78-87-5	5.0 (A)	230 (X)	36,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
cis-1,3-Dichloropropylene	10061-01-5	-	-	-	<0.50	<0.50	<0.50	<10	<2.5	<2.5	<2.5	<10	<0.50	<0.50	<0.50	<10
trans-1,3-Dichloropropylene	10061-02-6	-	-	-	<0.50	<0.50	<0.50	<10	<2.5	<2.5	<2.5	<10	<0.50	<0.50	<0.50	<10
Ethylbenzene (I)	100-41-4	74 (E)	18	170,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Ethylene dibromide	106-93-4	0.05 (A)	5.7 (X)	15,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Hexachloroethane	67-72-1	21	6.7 (X)	50,000 (S)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	2,900	ID	8,700,000	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Isopropyl benzene	98-82-8	2,300	28	56,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
4-Methyl-2-pentanone (MIBK) (I)	108-10-1	5,200	ID	20,000,000 (S)	<50	<50	<50	<100	<50	<50	<50	<100	<50	<50	<50	<100
Methylene chloride	75-09-2	5.0 (A)	1,500 (X)	1,400,000	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
Methyl-tert-butyl ether (MTBE)	1634-04-4	40 (E)	7,100 (X)	47,000,000 (S)	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<10
Naphthalene	91-20-3	1,500	11	31,000 (S)	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20	<5.0	<5.0	<5.0	<20
n-Propylbenzene (I)	103-65-1	230	ID	ID	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Styrene	100-42-5	100 (A)	80 (X)	310,000 (S)	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<20
1,1,1,2-Tetrachloroethane	630-20-6	320	ID	96,000	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<20
1,1,2,2-Tetrachloroethane	79-34-5	35	78 (X)	77,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Tetrachloroethylene	127-18-4	5.0 (A)	60 (X)	170,000	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Toluene (I)	108-88-3	790 (E)	270	530,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,2,4-Trichlorobenzene	120-82-1	70 (A)	99 (X)	300,000 (S)	<5.0	<5.0	<5.0	<20	<10	<5.0	<5.0	<25	<5.0	<5.0	<5.0	<20
1,1,1-Trichloroethane	71-55-6	200 (A)	89	1,300,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,1,2-Trichloroethane	79-00-5	5.0 (A)	330 (X)	110,000	<1.0	<1.0	<1.0	<20	<2.5	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<20
Trichloroethylene	79-01-6	5.0 (A)	200 (X)	4,900	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Trichlorofluoromethane	75-69-4	7,300	NA	1,100,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,2,3-Trichloropropane	96-18-4	120	NA	18,000	<1.0	<1.0	<1.0	<20	<5.0	<2.5	<5.0	<20	<1.0	<1.0	<1.0	<20
1,2,3-Trimethylbenzene	526-73-8	-	-	-	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,2,4-Trimethylbenzene	95-63-6	63 (E)	17	56,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
1,3,5-Trimethylbenzene	108-67-8	72 (E)	45	61,000 (S)	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Vinyl chloride	75-01-4	2.0 (A)	13 (X)	13,000	<1.0	<1.0	<1.0	<10	<5.0	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
m&p-Xylene	136777-61-2	-	-	-	<2.0	<2.0	<2.0	<20	<5.0	<5.0	<5.0	<20	<2.0	<2.0	<2.0	<20
o-Xylene	95-47-6	-	-	-	<1.0	<1.0	<1.0	<10	<2.5	<2.5	<2.5	<10	<1.0	<1.0	<1.0	<10
Xylenes	1330-20-7	280 (E)	49	190,000 (S)	<3.0	<3.0	<3.0	<30	<7.5	<7.5	<7.5	<30	<3.0	<3.0	<3.0	<30
Ammonia	7664-41-7	10,000 (N)	(CC)	7,100,000	4,300	3,700	3,400	4,000	3,600	3,100	3,100	3,500	2,700	1,900	2,100	3,300
Chloride	16887-00-6	250,000 (E)	50,000	NLV	47,000	46,000	51,000	42,000	38,000	39,000	39,000	37,000	<10,000	<10,000	<10,000	<10,000
Total dissolved solids	TDS	500,000 (E)	500,000	ID	1,200,000	1,300,000	1,500,000	1,500,000	1,700,000	1,800,000	1,700,000	1,800,000	710,000	640,000	560,000	540,000
pH	PH	6.5 to 8.5 (E)	6.5 to 9.0	ID	12.3	12.4	12.4	12.4	12.5	12.5	12.5	12.5	11.7	12.1	12	12

Notes:
(1) "CAS Number - Chemical Abstract Number
(2) "µg/L" - micrograms per liter or parts per billion
(3) - "S.U." - standard units
(4) - Samples collected from TMW-27 were labeled as "TMW-26".
"-" - No standard
*Per R299.44, June 25, 2018
~ Parameter not tested for at his location.
ID-Insufficient data to develop criterion.
NA-Not available.
NLV-Hazardous substance is not likely to volatilize under most conditions.
A-Criterion is the State of Michigan drinking water standard established pursuant to Section 5.
D-Calculate criterion exceeds 100%, hence it is reduced to 100% or 1.0e+9 ppb.
E-Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the act.
G-Groundwater Surface Water Interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
L-Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10)
of the act, and are not calculated using the algorithms and assumptions specified in pathway-specific rules.
M-Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.
N-The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitriteN, nitrate-N) in groundwater that is used as a source of drinking water
S-Criterion defaults to the hazardous substance-specific water solubility limit.
W-Concentrations of trihalomethanes in groundwater shall be added together to determine compliance with the Michigan
drinking water standard of 100 ug/L.
X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria tables is not protective
for surface water that is used as drinking water source.
AA-Comparison of these criteria may take into account an evaluation of whether the hazardous substances are adsorbed
to particulates rather than dissolved in water and whether filtered groundwater samples were used to evaluate groundwater.
CC-The generic GSI criteria are based on the toxicity of unionized ammonia.

Table 5
Groundwater Flow Calculations
RTRR - Riverview
18251 W. Jefferson, Riverview
ASTI Project No.: 10860

Purpose: To calculate groundwater flow from the Subject Property to the Monguagon Creek and Trenton Channel.

Equation: $Q = K\ A\ i$

Where: Q = groundwater flow (ft^3/day)
K = hydraulic conductivity (ft/day)
A = cross-sectional area of groundwater flow ($ft^{2)}$ (height of saturated zone (w) * length of GSI (l))
i = hydraulic gradient (unitless)

Northern Flow Zone				Note
wells: TMW-27 and MW-100s/i				
Hydraulic conductivity	K =	1.8	ft/day	Maximum K value for MW-100s & MW-100i
height of GW	w =	24.3	ft	height of saturated zone in MW-100s/MW-100i
	l =	1,810	ft	northern property line at Monguagon Creek and north end of sheet pile wall
	Area	43,983	ft^2	cross-sectional area of groundwater flow to the stream
	i =	0.01		hydraulic gradient between TMW-27 & MW-100s/i
	Q =	**792**	**ft^3/day**	
	Q =	**5,922**	**gal/day**	
	Q =	**4.11**	**gpm**	
	Q =	**3.27**	**gpd/ft**	

Southern Flow Zone				Note
wells: MW-101, MW-107s, MW-108, MW-110s, and MW-110D				
Hydraulic conductivity	K =	12.8	ft/day	Maximum K value in Southern Flow Zone
height of GW	w =	12.7	ft	height of saturated zone (average height in GSI wells)
	l =	3,230	ft	Southern end of sheet-pile wall to the southern property line at the Trenton Channnel
	Area	41,021	ft^2	cross-sectional area of groundwater flow to the stream
	i =	0.0005		maximum hydraulic gradient between MW-106 and MW107s
	Q =	**263**	**ft^3/day**	
	Q =	**1,964**	**gal/day**	
	Q =	**1.36**	**gpm**	
	Q =	**0.61**	**gpd/ft**	

Table 6
Representative Concentrations
Chemicals Exceeding the Groundwater Surface Water Interface Criteria
RTRR Property
18251 W. Jefferson, Riverview
ASTI Project No.: 10860

Northern Flow Zone Groundwater/Surface Water Interface (GSI) Wells: MW-100s and MW-100i

Parameter	CAS Number[1]	Number of Samples	Number of Detections	Maximum Detected Concentration (µg/L)[1]	Representative Concentration (µg/L)[2,3]	Groundwater Surface Water Interface Criteria (µg/L)
Arsenic	7440-38-2	8	8	470	283.1	10
Total Chromium[4]	7440-47-3	8	1	12	12	11
Selenium	7782-49-2	8	2	9	6.942	5
Mercury	7439-97-6	8	4	0.424	0.233	0.0013
Aniline[4]	62-53-3	8	1	7.3	7.3	4.0 (M); 3.0
Carbazole[4]	86-74-8	8	1	12	12	10 (M); 4.0
Dibenzofuran[4]	132-64-9	8	1	4.2	4.2	4.0
Fluoranthene	206-44-0	8	7	3.1	2.057	1.6
Methylphenol, 3- and 4-	MEPH1314	8	8	150	117.8	25
Phenanthrene	85-01-8	8	8	5.8	4.942	2.0 (M); 1.7
Naphthalene	91-20-3	8	7	240	187.5	11
Vinyl chloride	75-01-4	8	7	29	21.43	13 (X)
Xylenes	1330-20-7	8	5	84	64.18	49
Chloride	16887-00-6	8	8	290,000	186,278	50,000
Total Dissolved Solids	TDS	8	8	2,900,000	2,569,077	500,000

Southern Flow Zone GSI Wells: MW-101, MW-107s, MW-108, MW-110s, and MW-100D

Parameter	CAS Number	Number of Samples	Number of Detections	Maximum Detected Concentration (µg/L)[1]	Representative Concentration (µg/L)[2]	Groundwater Surface Water Interface Criteria (µg/L)
Total Chromium	7440-47-3	20	12	52	29.51	10
Mercury	7439-97-6	20	10	0.113	0.0784	0.0013
Silver[3]	7440-22-4	20	1	0.63	0.63	0.2 (M); 0.06
Methylphenol, 3- and 4-	MEPH1314	20	4	110	35.24	25
Phenanthrene[4]	85-01-8	20	1	2.5	2.5	2.0 (M); 1.7
Naphthalene	91-20-3	20	7	140	46.83	11
1,2,4-Trimethylbenzene	95-63-6	20	7	51	17.99	17
Total Dissolved Solids	TDS	20	20	1,800,000	1,294,677	500,000

Notes:
(1) CAS Number - Chemical Abstract Service Number
(2) - "µg/L" - micrograms per liter or parts per billion
(3) - The Representative Concentration is the 95% UCL
(4) - A 95% UCL could not be calculated from the dataset. Therefore, the maximum concentration was used as a conservative measure.

Table 7a
Chemical Mass Loading - Northern Flow Zone
RTRR - Riverview
18251 W. Jefferson, Riverview
ASTI Project No.: 10860

Northern Flow Zone

Parameter	CAS Number[1]	Wells withm Groundwater to Surface Water Interface Criteria Exceedance(s)	Length of GSI (ft)	Total Flow (gpd)[2]	Total Flow (L/day)[3]	Flow per Foot (gpd/ft)[4]	Representative Concentration (µg/L)[5]	Chemical Load to Stream (g/day)[6]
Arsenic	7440-38-2	MW-100s, MW-100i	1,785	5,837	22,093	3.27	283.1	6.25
Total Chromium	7440-47-3	MW-100i	1,785	5,837	22,093	3.27	12	0.27
Selenium	7782-49-2	MW-100s, MW-100i	1,785	5,837	22,093	3.27	6.942	0.15
Total Mercury	7439-97-6	MW-100s, MW-100i	1,785	5,837	22,093	3.27	0.233	0.01
Aniline	62-53-3	MW-100s	1,785	5,837	22,093	3.27	7.3	0.16
Carbazole	86-74-8	MW-100i	1,785	5,837	22,093	3.27	12	0.27
Dibenzofuran	132-64-9	MW-100s	1,785	5,837	22,093	3.27	4.2	0.09
Fluoranthene	206-44-0	MW-100i	1,785	5,837	22,093	3.27	2.057	0.05
Methylphenol, 3- and 4-	MEPH1314	MW-100s, MW-100i	1,785	5,837	22,093	3.27	117.8	2.60
Phenanthrene	85-01-8	MW-100s, MW-100i	1,785	5,837	22,093	3.27	4.942	0.11
Naphthalene	91-20-3	MW-100s, MW-100i	1,785	5,837	22,093	3.27	187.5	1.00
Vinyl chloride	75-01-4	MW-100s, MW-100i	1,785	5,837	22,093	3.27	21.43	0.47
Xylenes	1330-20-7	MW-100s	1,785	5,837	22,093	3.27	64.18	1.42
Chloride	16887-00-6	MW-100s, MW-100i	1,785	5,837	22,093	3.27	186,278	4,115
Total Dissolved Solids	TDS	MW-100s, MW-100i	1,785	5,837	22,093	3.27	2,569,077	56,758

Notes:
Northern Flow Zone defined as point where Monguagon Creek enters the property to the northern end of the sheet-pile wall.
MW-100s and MW-100i screen the same water-bearing zone.
(1) CAS Number - Chemical Abstract Service Number
(2) "gpd" - gallons per day
(3) "L/day" - liters per day
(4) "gpd/ft" - gallons per day per linear foot of GSI
(5) "µg/L" - micrograms per liter or parts per billion
(6) "g/day" - grams per day

Table 7b
Chemical Mass Loading - Southern Flow Zone
RTRR - Riverview
18251 W. Jefferson, Riverview
ASTI Project No.: 10860

Southern Flow Zone

Parameter	CAS Number[1]	Wells withm Groundwater to Surface Water Interface Criteria Exceedance(s)	Length of GSI (ft)[1]	Flow per Foot (gpd/ft)[2]	Total Flow (gpd)[3]	Total Flow (L/day)[4]	Representative Concentration (µg/L)[5]	Chemical Load to Stream (g/day)[6]
Total Chromium	7440-47-3	MW-108, MW-110s, MW-110D	2,720	0.61	1,659	6,280	29.51	0.19
Total Mercury	7439-97-6	MW-101, MW-108, MW-110s, MW-110D	3,230	0.61	1,970	7,458	0.0784	5.8E-04
Silver	7440-22-4	MW-101	480	0.61	293	1,108	0.63	7.0E-04
Methylphenol, 3- and 4-	MEPH1314	MW-107s	1,000	0.61	610	2,309	35.24	0.08
Phenanthrene	85-01-8	MW-107s	1,000	0.61	610	2,309	2.5	0.006
Naphthalene	91-20-3	MW-107s	1,000	0.61	610	2,309	46.83	0.11
1,2,4-Trimethylbenzene	95-63-6	MW-101	480	0.61	293	1,108	17.99	0.02
Total Dissolved Solids	TDS	MW-101, MW-107s, MW-108, MW-110s, MW-110D	3,230	0.61	1,970	7,458	1,294,677	9,655

Notes:
Northern Flow Zone defined as the southern end of the sheet-pile wall to the southern property line at the Trenton Channel.
MW-110s and MW-110D screen the same water-bearing zone.
(1) The length of the GSI accounts for the distance between wells with GSI exceedances, halfway to the nearest well without GSI exceedances, or to the flow zone boundry.
(2) "gpd/ft" - gallons per day per linear foot of GSI
(3) "gpd" - gallons per day
(4) "L/day" - liters per day
(5) "µg/L" - micrograms per liter or parts per billion
(6) "g/day" - grams per day

ATTACHMENTS

Attachment A

Soil Boring and Well Construction Logs

ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-100S & MW-100i

PROJECT NUMBER 10860	**DRILLING DATE** 10/14/2019 - 10/15/2019	**COORDINATES** 13448499.446, 248577.372
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 30 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEVATION** 578.4
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-100s = 581.97, MW-100i = 581.92

COMMENTS Driller: Cascade Drilling using rotosonic.Near the northern property boarder, in former stream bed, MW-100s screened at top of upper water-bearing zone, MW-100i screened at bottom of upper water-bearing zone

LOGGED BY GSO

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	-3				100s 100i	582
	-2					581
	-1					580
	0					579
			SILT & GRAVEL, brown, sandy silt and gravel, fine to coarse sand, fine to coarse gravel, sub-angular to angular, moist	GM	concrete cement grout	578
2.0	1					577
	2				bentonite	
8.0	3					576
						575
9.6	4		- cobbles present at about 4 ft. bgs. - saturated at about 4 ft. bgs			574
	5		SAND & GRAVEL, brown, clayey sand and cobbles, slag fill present, shards of metal, saturated	GC		573
1.1	6					572
12.4	7					571
	8		GRAVEL, brown, cobble-size slag fill, little clay, moist	GC		570
	9		COBBLES, brown, slag cobbles, little sand and silt, wet, fill	GM	filter pack	569
	10		SAND & GRAVEL, brown, silty sand and gravel, fine to coarse sand, fine to coarse gravel, sub-rounded to angular gravel and cobbles, wood fragments, slag, metal shard, fill	GW		568
3.7	11					567
	12					
160	13					566
	14					565
	15					564
72.2	16					563

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ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-100S & MW-100i

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	16				100s 100i	562
9.9	17					561
237	18		SAND, black, clayey fine to coarse sand, little gravel, rounded to sub-angular gravel, metal shards, wet	SW		560
	19					559
44	20		CLAY with GRAVEL, black, sandy clay and gravel, cobbles, saturated, fill - brick fragments at 22 ft. bgs	GC		558
	21					557
	22				filter pack	
55	22		SAND, black, clayey sand, little angular fine gravel, wet	SC		556
	23					555
4.0	24		CLAY, black, soft, sandy clay, high plasticity, fine to medium sand, moist	SC/CH		554
	25					553
2.6	26					552
	27		CLAY, black, soft clay, high plasticity moist - grades to gray at 29 ft. bgs	CH		551
1.9	28					550
	29				bentonite backfill	549
	30		Total depth: 30 ft. bgs			548
	31					547
	32					546
	33					545
	34					544
	35					543
	36					542
	37					541
	38					540
	39					539

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-101

PROJECT NUMBER 10860	**DRILLING DATE** 10/21/2019	**COORDINATES** 13448459.271, 244290.332
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 30 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 589.5 ft. AMSL
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-101: 593.15 ft. AMSL

COMMENTS Driller: Cascade Drilling using rotosonic. Near the southwest corner of the property. MW-101 screens the upper water-bearing zone.

LOGGED BY GSO

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	-3					593
	-2					592
	-1					591
	0					590
	1		SAND & GRAVEL, brown silty sand and gravel, loose, trace cobbles, dry	GM	concrete cement grout	589
3.5	2					588
6.5	3					587
	4					586
	5				bentonite	585
15.8	6					584
	7					583
6.3	8					582
3.8	9		CLAY, soft, sandy clay, little gravel, moist	SC		581
	10					580
10.7	11		SAND, brown, silty sand, little gravel and cobbles, brick fragments and slag, fill	SM		579
	12				filter pack	578
	13					577
	14					576
53.0	15					575
	16		CLAY, soft, sandy clay, fine to medium sand, little angular gravel, saturated			574

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ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-101

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	16					573
	17					572
	18		CLAY, brown/tan, stiff clay, medium/high plasticity, little sand, wet	CL		571
	19					570
	20		SAND, gray, loose, clayey coarse sand, little gravel and fine to medium sand, saturated	SC		569
13.3	21					568
	22		SAND, brown, silty fine sand, loose, moist	SM		567
	23		SAND, white, loose, clayey fine sand, moist	SC	filter pack	566
12.8	24					565
	25		CLAY, gray, soft clay, brick fragments, saturated	CH		564
9.6	26					563
	27					562
	28					561
	29					560
	30		Total depth: 30 ft. bgs			559
	31					558
	32					557
	33					556
	34					555
	35					554
	36					553
	37					552
	38					551
	39					550

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GROUNDWATER MONITORING WELL MW-102D

ENVIRONMENTAL

PROJECT NUMBER 10860	**DRILLING DATE** 10/22/2019	**COORDINATES** 13448148.742, 247771.931
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 60 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 589.4 ft. AMSL
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-102D: 592.05 ft. AMSL

COMMENTS Driller: Cascade Drilling using rotosonic. Near the southwest corner of the property. MW-101 screens the upper water-bearing zone.

LOGGED BY AJR

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	-2					592
	-1					591
	0		CLAY, gray, clay, with sand and gravel	CL	concrete	590
			SAND, dark brown, fine to coarse sand, with gravel and brick fragments	SW	cement grout	589
0.3	1					588
0.5	2					587
	3					586
0.6	4					585
	5					584
3.6	6		Sand, brown with white mottling, fine to coarse sand, with concrete, brick fragments, and cobbles - orange mottling at 6.5 ft. bgs - becomes brown			583
	7					582
6.8	8		SAND, dark brown, clayey fine to coarse sand, with gravel and cobbles, slag, dry			581
	9				bentonite	
3.4	10					580
0.1	11		SAND, dark brown, fine to coarse sand, with gravel and cobbles, moist			579
	12					578
0.2.	13					577
	14		CLAY, brown, very dense, clay, little sand and gravel, dry	CL		576
0.2	15					575
			CLAY, brown, very dense, clay, little subrounded to subangular cobbles and gravel			574
0.3	16					573
	17					

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-102D

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
0.2	18					572
	19					571
0.3	20		No returns			570
	21					569
	22					568
	23					567
	24		CLAY, dense, clay, little sand and gravel, high plasticity, wet	CH		566
	25					565
	26					564
	27					563
	28					562
	29				bentonite	561
0.2	30		▽			560
	31					559
0.1	32					558
	33					557
0.2	34					556
	35					555
	36					554
0.1	37					553
	38					552
	39					551
0.1	40					550
	41					549

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-102D

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
0.1	41					548
0.2	42					547
	43					546
	44				bentonite	545
0.3	45					544
0.1	46					543
	47					542
0.1	48					541
	49					540
	50					539
0.2	51				filter pack	538
	52		COBBLES, with sand and gravel, wet	GW		537
0.4	53					536
	54		CLAY, grey, dense, clay, little sand and gravel, high plasticity, wet	CH		535
	55					534
4.5	56		CLAY and SAND, very sandy clay, with cobbles and gravel, dry	CL		533
	57				sand backfill	532
	58					531
1.2	59					530
10.5	60		Total depth: 60 ft. bgs			529
	61					528
	62					527
	63					526
	64					525

ASTI ENVIRONMENTAL

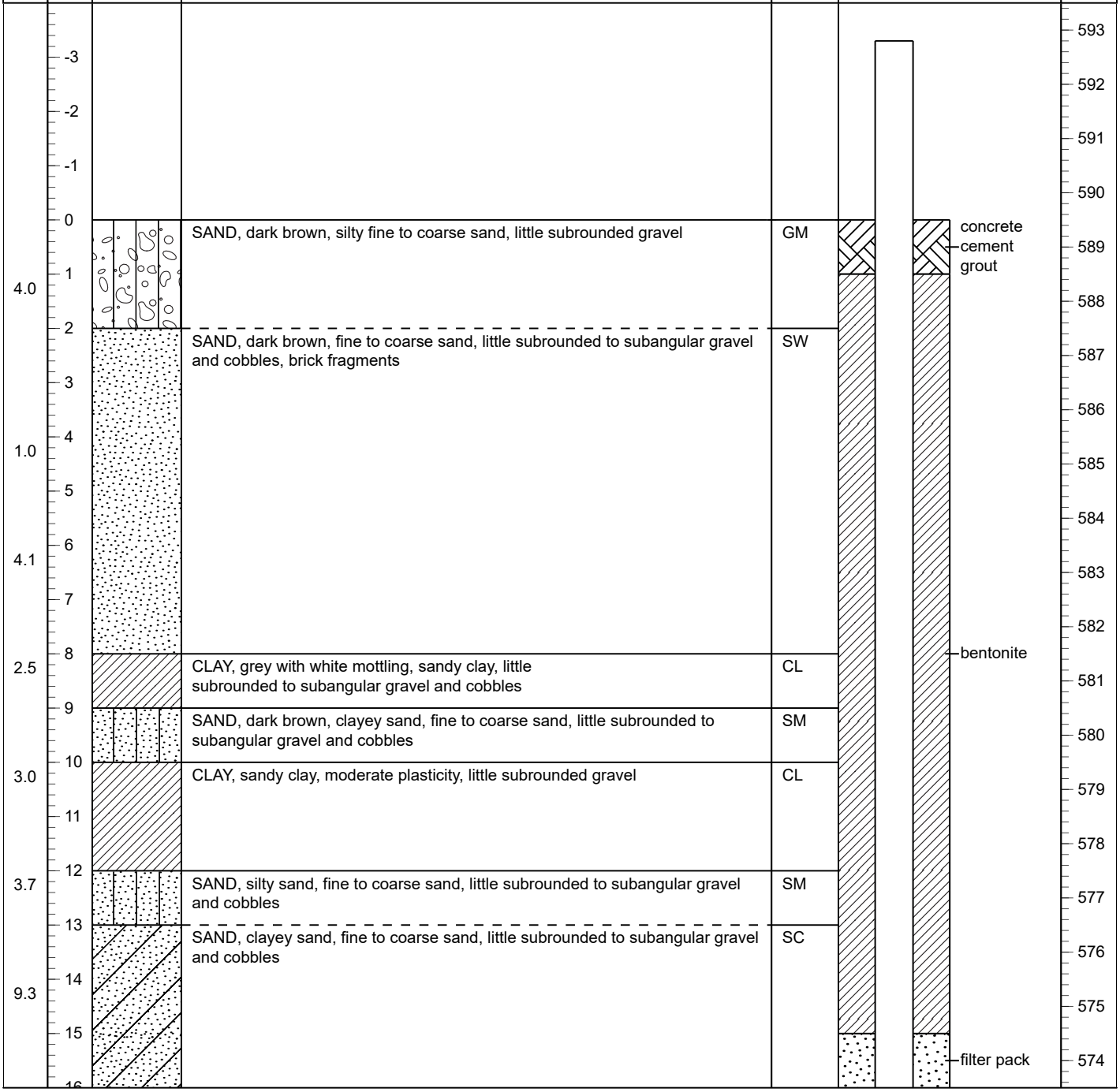
GROUNDWATER MONITORING WELL MW-103

PROJECT NUMBER 10860	**DRILLING DATE** 10/17/2019	**COORDINATES** 13448472.443, 247545.746
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 30 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 588.8
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-103: 592.11

COMMENTS Driller: Cascade Drilling using rotosonic. Located near near the center of the site in the former stream bed. Screened in the upper water-bearing zone.

LOGGED BY AJR

PID	Depth (ft)	Material Description	USCS
4.0	0 – 2	SAND, dark brown, silty fine to coarse sand, little subrounded gravel	GM
1.0	2 – 8	SAND, dark brown, fine to coarse sand, little subrounded to subangular gravel and cobbles, brick fragments	SW
4.1	8 – 9	CLAY, grey with white mottling, sandy clay, little subrounded to subangular gravel and cobbles	CL
2.5	9 – 10	SAND, dark brown, clayey sand, fine to coarse sand, little subrounded to subangular gravel and cobbles	SM
3.0	10 – 12	CLAY, sandy clay, moderate plasticity, little subrounded gravel	CL
3.7	12 – 13	SAND, silty sand, fine to coarse sand, little subrounded to subangular gravel and cobbles	SM
9.3	13 – 16	SAND, clayey sand, fine to coarse sand, little subrounded to subangular gravel and cobbles	SC



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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-103

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
11.0	17					573
			CLAY, dark brown, sandy clay, little gravel and cobbles	CL		572
16.3	18					571
	19					
3.5	20					570
			SAND, dark brown, coarse sand, little gravel and cobbles, metal shards, wood fragments, wet	SW		569
0.5	21					
	22		GRAVEL, dark brown, gravel and cobbles, metal shards, wood fragments, wet	GW	filter pack	568
0.5	23					567
	24					566
	25					565
1.2			CLAY, sandy clay, fine to coarse sand, little gravel, dry	CL		564
0.5	26		CLAY, grey with brown mottling, little gravel			563
	27					562
	28					
3.0	29				sand backfill	561
1.4	30					560
	31		Total depth: 30 ft. bgs			559
	32					558
	33					557
	34					556
	35					555
	36					554
	37					553
	38					552
	39					551
						550

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-104

PROJECT NUMBER 10860	**DRILLING DATE** 10/16/2019	**COORDINATES** 13448716.549, 247573.896
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 55 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 588.4
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-104: 591.68

COMMENTS Driller: Cascade Drilling using rotosonic. Located down gradient of WMU-27. Screened in the upper water-bearing zone.

LOGGED BY GSO

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	0		SAND, brown, loose, silty sand, fine to coarse, little fine to medium gravel, moist	SM	concrete cement grout	588
1.8	1		SAND, orange, loose, fine sand, little medium sand and fine gravel, dry	SP		587
	2		SAND & GRAVEL, brown, loose, silty sand, fine to coarse sand and sub-rounded to sub-angular gravel, brick fragments, metal shards, dry	GP		586
2.2	3					585
	4				bentonite	584
7.9	5					583
	6					582
12.1	7					581
	8					580
16	9					579
914.	10		- little gravel and sub-angular cobbles			578
9.0	11		SAND, black, clayey sand, fine to coarse sand, little sub-angular to rounded cobbles, wood fragments	SC	filter pack	577
	12		SAND, dark grey, clayey sand, some gravel, metal shards			576
12.2	13		CLAY, brown, very stiff, sandy clay, fine to coarse sand	CL		575
	14		CLAY, dark grey, sandy clay, high plasticity, some gravel and cobbles, wet			574
4.5	15					573

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-104

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
1.5	17					572
						571
	18		SAND, dark brown, clayey sand, fine to coarse sand	SC		
3.1					filter pack	570
	19		CLAY, dark brown, medium stiff, clay, high plasticity	CH		569
3.3	20		CLAY, grey, very stiff, clay, little fine sand, high plasticity, moist			568
	21					567
0.9	22					566
1.0	23					565
2.1	24					564
5.2	25					563
2.8	26					562
6.4	27					561
	28					560
5.1	29					559
	30		CLAY, grey, soft, clay, little fine sand, trace fine gravel, high plasticity, wet	CL	bentonite backfill	558
0.4	31					557
	32					556
0.8	33					555
	34					554
0.5	35					553
1.3	36					552
	37					551
	38					550
	39					549
2.5						

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ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-104

PID	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	40					548
1.2	41					547
	42					546
0.4	43					545
1.5	44					544
	45					543
1.2	46					542
	47				bentonite backfill	541
0.9	48					540
	49					539
5.7	50					538
	51					537
	52					536
	53		LIMESTONE, bedrock			535
	54					534
	55		Total depth: 55 ft. bgs			533
	56					532
	57					531
	58					530
	59					529
	60					528
	61					527
	62					526
	63					525

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-105

PROJECT NUMBER 10860	**DRILLING DATE** 10/16/2019	**COORDINATES** 13448776.156, 247457.881
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 30 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 588.7
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-105: 592.15

COMMENTS Driller: Cascade Drilling using rotosonic. Located down gradient of WMU-29. Screened in the upper water-bearing zone.

LOGGED BY GSO

PID (ppm)	Depth (ft)	Material Description	USCS	Elevation (ft)
	0	SAND & GRAVEL, brown, silty sand and gravel, moist	GM	588
0.8	1			587
0.6	2	- cobbles present		586
	3			585
	4			584
0.7	5			583
	6	CLAY, brown, dense, sandy clay, little gravel, medium plasticity, moist	CL	582
	7			581
2.0	8	SAND & GRAVEL, grey, loose, clayey sand and gravel, fine to coarse sand and sub-rounded to sub-angular gravel, some cobbles, wet (drilling water)	GC	580
	9			579
0.4	10			578
	11			577
	12	CLAY, black, medium dense, sandy clay, some rounded gravel, moist	CL	576
	13	CLAY, grey with orange mottling, hard clay, little rounded gravel, dry		575
	14			574
	15			573

Well Diagram: concrete cement grout; bentonite; filter pack; sand backfill; bentonite backfill

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ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-105

PID (ppm)	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	16					572
	17					571
	18					570
	19					569
	20					568
	21					567
	22					566
	23				bentonite backfill	565
	24					564
	25					563
	26					562
	27					561
	28					560
	29					559
	30		Total depth: 30 ft. bgs			558
	31					557
	32					556
	33					555
	34					554
	35					553
	36					552
	37					551
	38					550
	39					549

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-106

PROJECT NUMBER 10860	**DRILLING DATE** 10/17/2019	**COORDINATES** 13448256.357, 246609.325
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 30 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 590.7
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-106: 593.87

COMMENTS Driller: Cascade Drilling using rotosonic. Upgradient well located in the former stream bed. Screens the upper water-bearing zone. **LOGGED BY** GSO

PID (ppm)	Depth (ft)	Material Description	USCS
2.0	0 to 1	SAND, dark brown, silty sand, fine to coarse, some sub-rounded gravel and cobbles	GM
9.6	1 to 4	SAND & GRAVEL, grey, sand and gravel, sub-angular gravel	GW
42.6	4 to 7	SAND, dark brown sand, some sub-rounded gravel and cobbles	
2.3	7 to 7.5	SAND, light grey, sand, very fine, with gravel	SP
2.0	7.5 to 10	SAND, dark brown, silty sand, some sub-rounded to sub-angular gravel and cobbles, wet	GM
	10 to 13	GRAVEL, dark brown, gravel and cobbles, some coarse sand, slag, brick fragments	GW
	13 to 16	no returns	

Well Diagram: Borehole collapse

Elevation (ft): 594, 593, 592, 591, 590, 589, 588, 587, 586, 585, 584, 583, 582, 581, 580, 579, 578, 577, 576, 575

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ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-106

PID (ppm)	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	16				Borehole collapse	574
	17					573
	18					572
	19					571
	20		SLAG, with sub-angular gravel, fill	GP		570
1.5	21				filter pack	569
	22		SAND, dark grey, clayey sand, some gravel	GC		568
	23		CLAY, sandy clay, some gravel, high plasticity	CL		567
	24					566
3.0	25					565
	26		- reduced gravel content			564
	27					563
	28		- little sand, wood, brick fragments, slag, fill		sand backfill	562
	29					561
6.7	30					560
	31		Total depth: 30 ft. bgs			559
	32					558
	33					557
	34					556
	35					555
	36					554
	37					553
	38					552
	39					551

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ASTI ENVIRONMENTAL

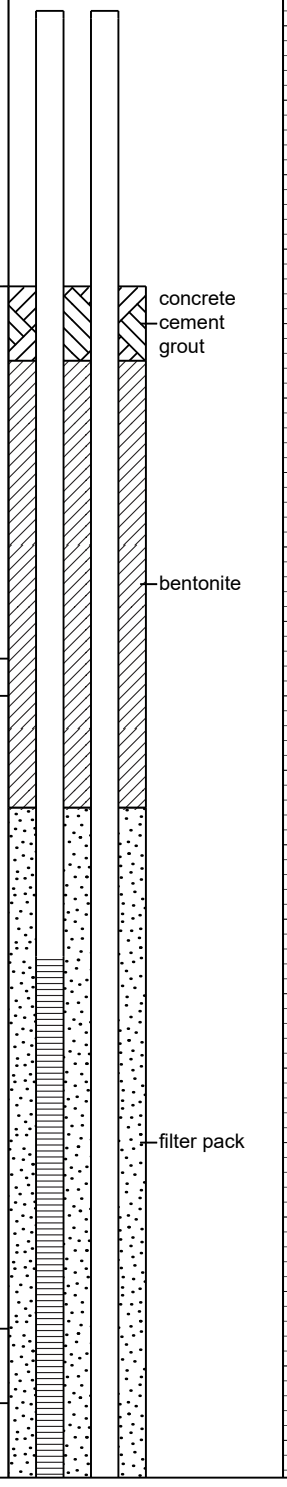
GROUNDWATER MONITORING WELL MW-107S & MW-107D

PROJECT NUMBER 10860	**DRILLING DATE** 10/17/2019	**COORDINATES** 13448892.413, 246834.696
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 30 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 586.5
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-107s: 590.47, MW-107D: 590.19

COMMENTS Driller: Cascade Drilling using rotosonic. Downgradient well . Screens the upper water-bearing zone and second water-bearing zone.

LOGGED BY AJR

PID (ppm)	Depth (ft)	Material Description	USCS
	0	SAND & GRAVEL, dark brown, fine to coarse sand and gravel, sub-rounded gravel, cobbles, slag, dry	GW
	1	- becomes light grey	
	2	- becomes brown	
2.2	3		
4.4	4		
	5	CLAY & GRAVEL, brown, sandy, clay and gravel, sub-angular gravel	CL
12.4	6	GRAVEL, yellow, gravel, some sand, brick fragments	GP
	7	SAND, dark grey, fine to coarse sand, some gravel	
7.6	8	GRAVEL, yellow, gravel, some sand, brick fragments	
4.8	9	SAND, grey fine to coarse sand, with gravel and cobbles, wood fragments, slag	
28.8	10	- brick fragments	
	11		
6.1	12		
	13	SAND, clayey sand, with gravel, brick fragments, moist	
5.9	14	CLAY, dark brown, sandy clay, some gravel, low plasticity, moist	CL
7.2	15	SAND and GRAVEL, fine to coarse sand, some gravel, wood, cloth material, brick fragments, wet	GW



Elevation (ft)
590
589
588
587
586
585
584
583
582
581
580
579
578
577
576
575
574
573
572
571

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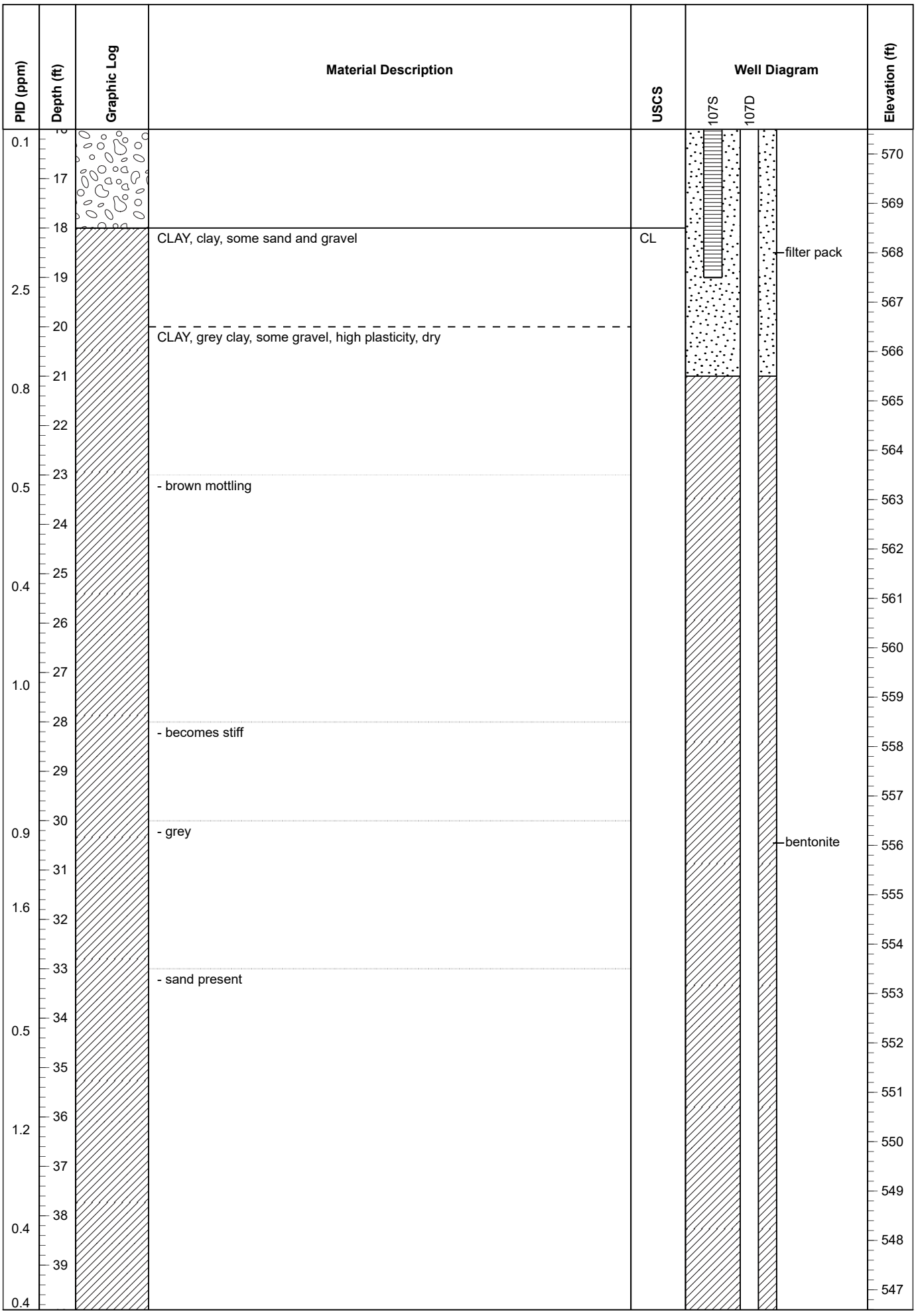
ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-107S & MW-107D



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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-107S & MW-107D

PID (ppm)	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram (107S / 107D)	Elevation (ft)
	40				bentonite	546
0.1	41					545
	42					544
0.1	43					543
	44		SAND, clayey sand, fine to coarse sand, some gravel and cobbles	SC	filter pack	542
	45					541
0.1	46					540
	47					539
0.1	48		CLAY, grey, very stiff, clay, some sand, high plasticity	CH		538
	49				sand backfill	537
0.1	50		Total depth: 50 ft. bgs			536
	51					535
	52					534
	53					533
	54					532
	55					531
	56					530
	57					529
	58					528
	59					527
	60					526
	61					525
	62					524
	63					523

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-108

PROJECT NUMBER 10860
PROJECT NAME RTRR - Riverview
CLIENT Riverview-Trenton Rail Road Company
ADDRESS 18521 W. Jefferson
City, State Riverview, MI

DRILLING DATE 10/17/2019
TOTAL DEPTH 30 ft. bgs
DIAMETER 6 inches
CASING 2- in. dia. PVC
SCREEN 2-in. dia. PVC Factory Slotted

COORDINATES 13448926.796, 245839.708
COORD SYS 2113 - Michigan South
COMPLETION Stick-up Steel Casing
GROUND SURFACE ELEV. 592.1
WELL TOC MW-108: 595.18

COMMENTS Driller: Cascade Drilling using rotosonic. Downgradient well. Screens the upper water-bearing zone.

LOGGED BY AJR

PID (ppm)	Depth (ft)	Material Description	USCS	Elevation (ft)
7.9	0	SAND, fine to coarse sand, with sub-rounded to sub-angular gravel and cobbles, slag, brick fragments, metal shards	SW	592
33.1	4	- light grey, wood fragments		588
5.5	4	SAND, silty sand, fine to coarse, some slag gravel and cobbles	SM	588
3.0	6	SAND, light grey, sand, with gravel, wood and slag	SW	586
	7	SAND, dark brown, clayey sand, fine to coarse, with sub-rounded to sub-angular gravel and cobbles, slag, moist	SC/GC	585
4.1	8	GRAVEL, cobble-size slag fill, some fine to coarse sand	GW	584
	9	SAND & GRAVEL, dark brown, silty sand and gravel, cobbles, fine to coarse sand, slag	GM	583
18.4	10	SAND, dark brown fine to coarse sand, gravel and cobble-size slag fill	GW	582
1.0	11	- becomes tan		581
1.4	13	SAND, clayey sand, little gravel, slag, glass, brick fragments, metal shards	SC/GC	579
2.1	15	SAND, tan, fine to coarse sand, with cobbles, slag, brick fragments	GW	577

Well Diagram: concrete cement grout; bentonite

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ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-108

PID (ppm)	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	16					576
2.2	17		SAND, brown, clayey sand, some gravel and slag, dry	SC	bentonite	575
	18					574
0.8	19		CLAY & GRAVEL, tan, clay and gravel, some sand and cobbles, moist	GC		573
0.1	20		SAND, clayey sand, fine to coarse, with cobbles and slag, wet	SC		572
0.1	21					571
	22					570
0.2	23					569
	24					568
0.2	25					567
	26				filter pack	566
	27		CLAY, sandy clay, with cobbles, wet	CL		565
6.8	28					564
	29					563
	30		No returns			562
1.3	31					561
	32					560
	33					559
	34					558
	35		Bedrock, no returns, driller's opinion			557
			Total depth: 30 ft. bgs			
	36					556
	37					555
	38					554
	39					553

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-109S & MW-109D

PROJECT NUMBER 10860	**DRILLING DATE** 10/21/2019	**COORDINATES** 13448543.489, 245393.964
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 38 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 596.0
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-109s: 599.91, MW-109D: 599.93

COMMENTS Driller: Cascade Drilling using rotosonic. Upgradient well. Screens the upper water-bearing zone and the second water-bearing zone.

LOGGED BY GSO

PID (ppm)	Depth (ft)	Material Description	USCS	Elevation (ft)
	0	SAND & GRAVEL, brown, loose, silty sand and gravel, little cobbles slag and brick fragments, fill, dry	SW	596
12.0	4	SAND, red, loose, silty sand, some gravel, slag and brick fragments, moist		592
10.1	5			591
25.5	6	SAND & GRAVEL, brown, loose sand and gravel, little silt, cobble-size slag, metal shard, moist		590
10.1	7	SAND, red, loose silty sand, little fine gravel, slag, dry	SW	589
259	8	SAND & GRAVEL, tan, loose, fine to coarse sand and gravel, little silt, brick fragments, wood, dry	GW	588
	10	CLAY, grey, sandy clay, fine to medium sand, slight plasticity, moist	CL	586
44.1	10	SAND & GRAVEL, dark brown, loose coarse sand and gravel, little fine to medium sand and silt, saturated	GP	586
	11	CLAY, brown, stiff, sandy clay, little fine to coarse rounded to sub-angular gravel, dry	CL	585
58.3	12	SAND, grey, loose, silty sand, little fine to medium rounded gravel, dry	SM	584
9.7	14	- becomes brown, slag, wood, brick fragments present		582

Well Diagram: 109S, 109D — concrete; cement grout; bentonite; filter pack; sand backfill; bentonite

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ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-109S & MW-109D

PID (ppm)	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
	17					579
	18		No returns, wood stuck in tip, possible rail road tie			578
	19					577
	20		SAND & GRAVEL, black, loose coarse sand and gravel, saturated	GP	bentonite	576
7.8	21		CLAY, grey, stiff, sandy clay, little gravel, trace tine sand, wood fragments, wet	CL		575
	22		SAND & GRAVEL, grey, loose, silty sand and gravel, fine to coarse sand, fine to medium gravel, sub-rounded to sub-angular gravel, dry	GM		574
	23		CLAY, grey, soft, sandy clay, little angular gravel, wet	CL		573
1.4	24		SAND, grey, loose, silty sand, fine to coarse, little gravel, dry	SM		572
	25		CLAY, grey, sandy clay, little gravel, metal shards, wet	CL		571
	26		SAND, black and orange, fine sand, little fine gravel, rounded gravel, moist	SP	filter pack	570
	27		SAND, fine sand, rail road tie and spike			569
	28					568
	29					567
	30		CLAY, grey, soft, sandy clay, fine sand, rail road spike	CL		566
	31		CLAY, grey with orange mottling, very stiff, clay, moist		sand backfill	565
	32					564
	33					563
	34					562
	35				bentonite backfill	561
	36					560
	37					559
	38		No returns, bedrock (driller's opinion)			558
			Total depth: 38 ft. bgs			
	39					557

produced by ESlog.ESdat.net on 06 Jul 2020

ASTI ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-110S & MW-110D

PROJECT NUMBER 10860	**DRILLING DATE** 10/21 - 22/2019	**COORDINATES** 13448929.408, 244810.710
PROJECT NAME RTRR - Riverview	**TOTAL DEPTH** 38 ft. bgs	**COORD SYS** 2113 - Michigan South
CLIENT Riverview-Trenton Rail Road Company	**DIAMETER** 6 inches	**COMPLETION** Stick-up Steel Casing
ADDRESS 18521 W. Jefferson	**CASING** 2- in. dia. PVC	**GROUND SURFACE ELEV.** 587.6
City, State Riverview, MI	**SCREEN** 2-in. dia. PVC Factory Slotted	**WELL TOC** MW-110S: 591.22, MW-110D: 591.23

COMMENTS Driller: Cascade Drilling using rotosonic. Downgradient well. Screens the upper water-bearing zone and the second water-bearing zone.

LOGGED BY GSO

PID (ppm)	Depth (ft)	Material Description	USCS
	0	SAND, brown, loose, silty sand, fine to medium, little gravel, dry	SM
2.0	2	SAND, black, loose, silty sand, fine to coarse, trace fine gravel, dry	
3.5	5		
3.1	6	GRAVEL, grey, loose, silty gravel, fine to coarse, with cobbles, little sand, gravel-size slag, dry	GM
16.3	8	- becomes moist	
0.8	10	SAND & GRAVEL, black, loose, silty sand and gravel, little cobbles, slag, moist	
1.1	12		
1.5	14	GRAVEL, tan, loose, clayey gravel, little sand, saturated	GC
	15		

Well Diagram: 110S, 110D — concrete cement grout; bentonite; filter pack

Elevation (ft): 591, 590, 589, 588, 587, 586, 585, 584, 583, 582, 581, 580, 579, 578, 577, 576, 575, 574, 573, 572

produced by ESlog.ESdat.net on 12 Mar 2021

ASTi ENVIRONMENTAL

GROUNDWATER MONITORING WELL MW-110S & MW-110D

PID (ppm)	Depth (ft)	Graphic Log	Material Description	USCS	Well Diagram	Elevation (ft)
2.6	17				110S 110D	571
	18				filter pack	570
0.8	19		CLAY, tan, stiff, clay, little sand and gravel, moist	CL	sand backfill	569
	20		SAND & GRAVEL, grey, loose, clayey sand and gravel, fine to coarse gravel, with cobbles, saturated	GC		568
	21					567
	22				bentonite	566
1.3	23		- increased cobble content 22 ft. bgs to 28 ft. bgs			565
	24					564
0.8	25					563
	26					562
1.0	27					561
	28				filter pack	560
1.5	29		SAND, brown, clayey sand, fine to coarse, little fine to medium angular gravel, saturated	SC		559
	30		SAND & GRAVEL, grey, sand and gravel, coarse sand, little clay, with cobbles, saturated	GC		558
	31		Wood (possible log)			557
	32		CLAY, grey, stiff, clay, little sand and gravel, moist	CL	sand backfill	556
	33					555
	34		LIMESTONE, bedrock		bentonite backfill	554
	35					553
	36		Total depth: 35 ft. bgs			552
	37					551
	38					550
	39					549
						548

produced by ESlog.ESdat.net on 12 Mar 2021

ENVIRONMENTAL STRATEGIES CORPORATION
11911 Freedom Drive Suite 900
Reston, Virginia 20190
703-709-6500

Project Number: 193076	*Site Id:* TMW27	Page 1 of 1
Total Depth: 16.50'	*Borehole Diameter:* 8.00in	
Elevation: 589.75'	*Datum:* Mean Sea Level	

Project Name: DSC Ltd. - Trenton, Michigan

Address:

City, State: Trenton, Michigan

Logged By: K. Heine *Date Completed:* 06/01/00

Contractor: Alliance

Certified By: D. Wells

Drilling Method: Hollow Stem Auger

Blank Casing:
type: PVC *dia:* 2.00in *fm:* -2.67' *to:* 6.00'

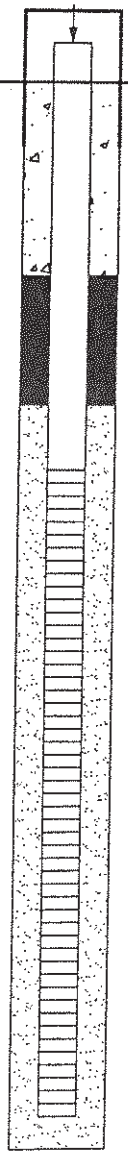
Screens:
type: Slotted *size:* 0.010in *dia:* 2.00in *fm:* 6.00' *to:* 16.00'

Annular Fill:
type: Cement *fm:* 0.00' *to:* 3.00'
type: Bentonite Chips *fm:* 3.00' *to:* 5.00'
type: Fine Sand Filter *fm:* 5.00' *to:* 16.50'

Depth (feet)	Blow Count	Recovery (%)	Vapor Reading PID (ppm)	Sample No.	Graphic Log	USCS Code/ Rock Type	Material Description
5		100		4-6		SP	GRAVELLY SAND, very dark grey, fine to coarse grained, poorly sorted, ~20% gravel with angular clasts up to 1.5-in. diameter, wood fill in lower 0.5 ft., damp.
10		100		9-11		CL	CLAY, medium grey, medium to hard, medium plasticity, trace pebbles, wet.
15		100		14-16			CLAY, light to medium grey and light brown, hard, low plasticity, trace pebbles, damp.

Well Construction

MP. EL. 592.42



Attachment B

August 4, 2020 Slug Test Data

WELL ID: RTRR - MW-100s - Slug In 1

Local ID: MW-100s
Date: 8/4/2020
Time:

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	10	Feet

Depths to:

water level (DTW)	2.41	Feet
top of screen (TOS)	4	Feet
Base of Aquifer (DTB)	28	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

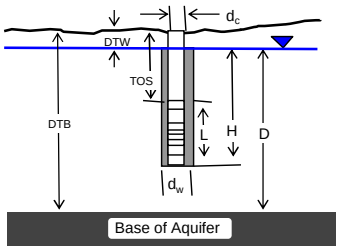
L_{wetted}	10	Feet
D =	25.59	Feet
H =	11.59	Feet
L/r_w =	40.00	
$y_{0\text{-DISPLACEMENT}}$ =	1.81	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

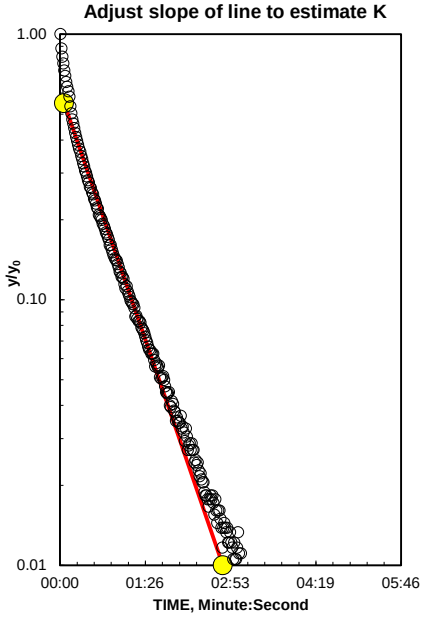
Partial penetrate A =	2.840	
B =	0.460	
ln(Re/rw) =	2.475	
Re =	2.97	Feet
Slope =	0.01081	$\log_{10}$/sec
$t_{90\%}$ recovery =	93	sec

Input is consistent.

K = 1.8 Feet/Day



Adjust slope of line to estimate K



K= 1.8 is less than likely minimum of 3 for Fine Sand

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:00.0	12.60
2	0:00:06.0	11.99
3	0:00:12.0	11.66
4	0:00:18.0	11.49
5	0:00:24.0	11.37
6	0:00:30.0	11.28
7	0:00:36.0	11.21
8	0:00:42.0	11.16
9	0:00:48.0	11.11
10	0:00:54.0	11.06
11	0:01:00.0	11.03
12	0:01:06.0	11.00
13	0:01:12.0	10.98
14	0:01:18.0	10.95
15	0:01:24.0	10.94
16	0:01:30.0	10.92
17	0:01:36.0	10.90
18	0:01:42.0	10.89
19	0:01:48.0	10.88
20	0:01:54.0	10.87
21	0:02:00.0	10.86
22	0:02:06.0	10.85
23	0:02:12.0	10.85
24	0:02:18.0	10.84
25	0:02:24.0	10.84
26	0:02:30.0	10.83
27	0:02:36.0	10.83
28	0:02:42.0	10.83
29	0:02:48.0	10.82
30	0:02:54.0	10.82
31	0:03:00.0	10.82
32	0:03:06.0	10.81
33	0:03:12.0	10.81
34	0:03:18.0	10.81
35	0:03:24.0	10.81
36	0:03:30.0	10.82
37	0:03:36.0	10.81
38	0:03:42.0	10.81
39	0:03:48.0	10.81
40	0:03:54.0	10.81
41	0:04:00.0	10.81
42	0:04:06.0	10.81
43	0:04:12.0	10.80
44	0:04:18.0	10.80
45	0:04:24.0	10.80

WELL ID: RTRR - MW-100i - Slug In 1

Local ID: MW-100i
Date: 8/4/2020
Time: 0:00

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	10	Feet

Depths to:

water level (DTW)	5.84	Feet
top of screen (TOS)	17	Feet
Base of Aquifer (DTB)	27	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

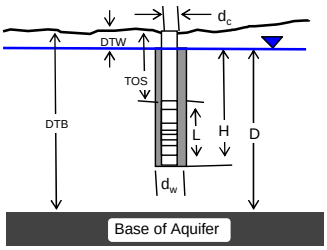
L_{wetted}	10	Feet
D =	21.16	Feet
H =	21.16	Feet
L/r_w =	40.00	
$y_{0\text{-DISPLACEMENT}}$ =	1.68	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

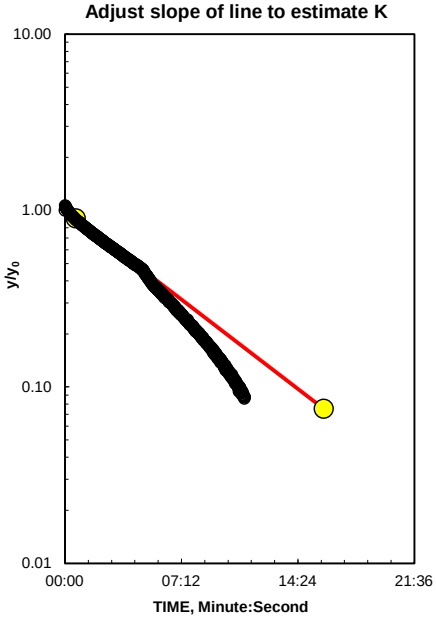
Fully penetrate C =	2.451	
ln(Re/rw) =	3.235	
Re =	6.35	Feet
Slope =	0.001174	$\log_{10}$/sec
$t_{90\%}$ recovery =	852	sec

Input is consistent.

K = 0.26 Feet/Day



Adjust slope of line to estimate K



K= 0.26 is less than likely minimum of 3 for Fine Sand

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

MW-100i is screened in a clayey sand layer.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	22.45
2	0:00:14.0	22.41
3	0:00:28.0	22.32
4	0:00:42.0	22.25
5	0:00:56.0	22.19
6	0:01:10.0	22.13
7	0:01:24.0	22.08
8	0:01:38.0	22.03
9	0:01:52.0	21.98
10	0:02:06.0	21.94
11	0:02:20.0	21.89
12	0:02:34.0	21.86
13	0:02:48.0	21.82
14	0:03:02.0	21.78
15	0:03:16.0	21.75
16	0:03:30.0	21.71
17	0:03:44.0	21.68
18	0:03:58.0	21.65
19	0:04:12.0	21.61
20	0:04:26.0	21.59
21	0:04:40.0	21.56
22	0:04:54.0	21.52
23	0:05:08.0	21.47
24	0:05:22.0	21.42
25	0:05:36.0	21.39
26	0:05:50.0	21.36
27	0:06:04.0	21.33
28	0:06:18.0	21.30
29	0:06:32.0	21.27
30	0:06:46.0	21.24
31	0:07:00.0	21.22
32	0:07:14.0	21.20
33	0:07:28.0	21.17
34	0:07:42.0	21.15
35	0:07:56.0	21.14
36	0:08:10.0	21.11
37	0:08:24.0	21.10
38	0:08:38.0	21.08
39	0:08:52.0	21.06
40	0:09:06.0	21.04
41	0:09:20.0	21.03
42	0:09:34.0	21.01
43	0:09:48.0	21.00
44	#N/A	#N/A
45	#N/A	#N/A

WELL ID: RTRR - MW-100i - Slug Out 1

Local ID: MW-100i
Date: 8/4/2020
Time: 0:00

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	10	Feet

Depths to:

water level (DTW)	5.84	Feet
top of screen (TOS)	17	Feet
Base of Aquifer (DTB)	27	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

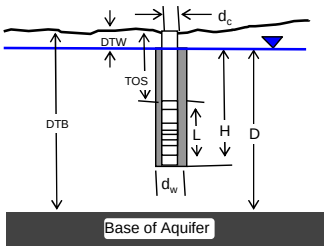
L_{wetted}	10	Feet
D =	21.16	Feet
H =	21.16	Feet
L/r_w =	40.00	
$y_{0\text{-DISPLACEMENT}}$ =	1.89	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

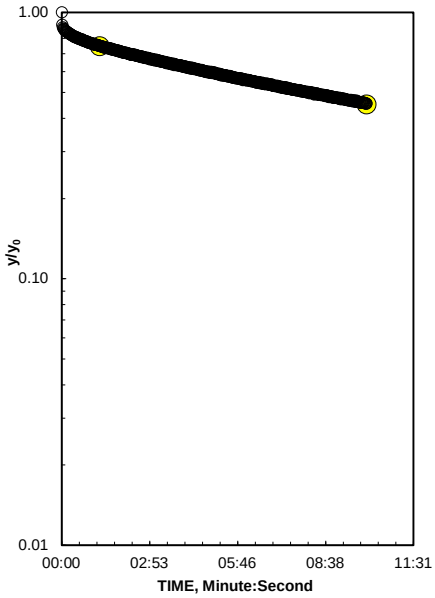
Fully penetrate C =	2.451	
ln(Re/rw) =	3.235	
Re =	6.35	Feet
Slope =	0.000418	$\log_{10}$/sec
$t_{90\%}$ recovery =	2392	sec

Input is consistent.

K = 0.093 Feet/Day



Adjust slope of line to estimate K



K= 0.093 is less than likely minimum of 3 for Fine Sand

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

MW-100i is screened in a clayey sand layer.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	18.87
2	0:00:13.0	19.18
3	0:00:26.0	19.24
4	0:00:39.0	19.27
5	0:00:52.0	19.30
6	0:01:05.0	19.33
7	0:01:18.0	19.36
8	0:01:31.0	19.38
9	0:01:44.0	19.40
10	0:01:57.0	19.42
11	0:02:10.0	19.44
12	0:02:23.0	19.46
13	0:02:36.0	19.48
14	0:02:49.0	19.49
15	0:03:02.0	19.51
16	0:03:15.0	19.53
17	0:03:28.0	19.54
18	0:03:41.0	19.57
19	0:03:54.0	19.57
20	0:04:07.0	19.59
21	0:04:20.0	19.60
22	0:04:33.0	19.62
23	0:04:46.2	19.64
24	0:04:59.0	19.64
25	0:05:12.0	19.66
26	0:05:25.0	19.67
27	0:05:38.0	19.69
28	0:05:51.3	19.70
29	0:06:04.0	19.71
30	0:06:17.0	19.72
31	0:06:30.0	19.74
32	0:06:43.0	19.75
33	0:06:56.0	19.76
34	0:07:09.0	19.77
35	0:07:22.0	19.79
36	0:07:35.0	19.80
37	0:07:48.0	19.80
38	0:08:01.0	19.82
39	0:08:14.0	19.83
40	0:08:27.0	19.84
41	0:08:40.0	19.84
42	0:08:53.0	19.86
43	0:09:06.0	19.87
44	0:09:19.0	19.87
45	0:09:32.0	19.88

WELL ID: RTRR - MW-101 - Slug In 1

Local ID: MW-101
Date: 8/4/2020
Time: 0:00

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	20	Feet

Depths to:

water level (DTW)	11.7	Feet
top of screen (TOS)	10	Feet
Base of Aquifer (DTB)	30	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

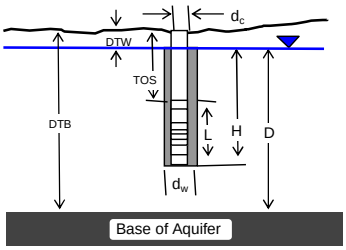
L_{wetted}	18.3	Feet
D =	18.3	Feet
H =	18.3	Feet
L/r_w =	73.20	
$y_{0\text{-DISPLACEMENT}}$ =	1.87	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

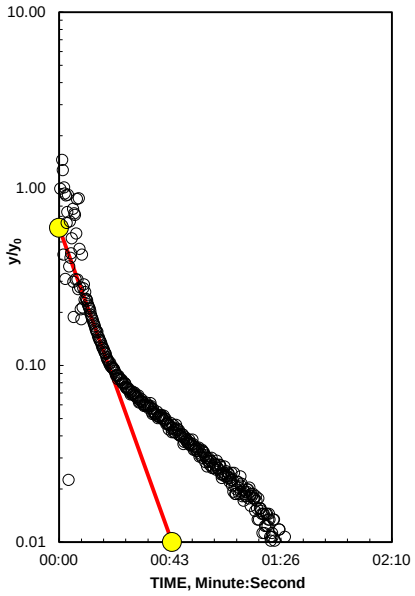
Fully penetrate C =	3.492	
ln(Re/rw) =	3.290	
Re =	6.71	Feet
Slope =	0.040413	$\log_{10}$/sec
$t_{90\%}$ recovery =	25	sec

Input is consistent.

K = 5 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

MW-101 is screened is a clayey sand.

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:00.0	13.30
2	0:00:02.4	13.97
3	0:00:04.4	14.19
4	0:00:06.4	13.53
5	0:00:08.4	14.37
6	0:00:10.4	14.73
7	0:00:12.4	14.82
8	0:00:14.4	14.88
9	0:00:16.4	14.93
10	0:00:18.4	14.97
11	0:00:20.4	14.98
12	0:00:22.4	15.01
13	0:00:24.4	15.02
14	0:00:26.4	15.03
15	0:00:28.4	15.04
16	0:00:30.4	15.04
17	0:00:32.4	15.05
18	0:00:34.4	15.06
19	0:00:36.4	15.06
20	0:00:38.4	15.07
21	0:00:40.4	15.07
22	0:00:42.4	15.08
23	0:00:44.4	15.08
24	0:00:46.4	15.09
25	0:00:48.4	15.09
26	0:00:50.4	15.10
27	0:00:52.4	15.10
28	0:00:54.4	15.11
29	0:00:56.4	15.11
30	0:00:58.4	15.11
31	0:01:00.4	15.11
32	0:01:02.4	15.12
33	0:01:04.4	15.12
34	0:01:06.4	15.12
35	0:01:08.4	15.13
36	0:01:10.4	15.13
37	0:01:12.4	15.13
38	0:01:14.4	15.13
39	0:01:16.4	15.13
40	0:01:18.4	15.14
41	0:01:20.4	15.14
42	0:01:22.4	15.14
43	0:01:24.4	15.15
44	0:01:26.4	15.15
45	0:01:28.4	15.15

WELL ID: RTRR - MW-101 Slug Out

Local ID: MW-101
Date: 8/4/2020
Time:

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	20	Feet

Depths to:

water level (DTW)	11.7	Feet
top of screen (TOS)	10	Feet
Base of Aquifer (DTB)	30	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

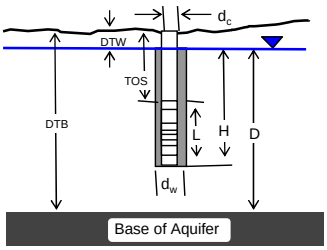
L_{wetted}	18.3	Feet
D =	18.3	Feet
H =	18.3	Feet
L/r_w =	73.20	
$y_{0\text{-DISPLACEMENT}}$ =	1.91	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

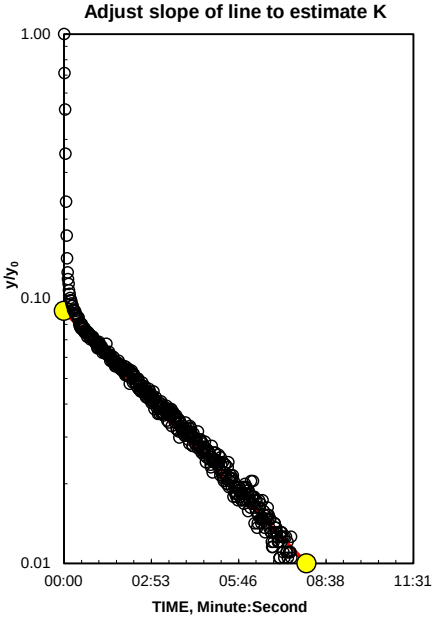
Fully penetrate C =	3.492	
ln(Re/rw) =	3.290	
Re =	6.71	Feet
Slope =	0.001988	$\log_{10}$/sec
$t_{90\%}$ recovery =	503	sec

Input is consistent.

K = 0.25 Feet/Day



Adjust slope of line to estimate K



K= 0.25 is less than likely minimum of 3 for Fine Sand

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

MW-101 is screened in a clayey sand.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	17.28
2	0:00:11.0	15.57
3	0:00:22.0	15.54
4	0:00:33.0	15.52
5	0:00:44.0	15.51
6	0:00:55.0	15.51
7	0:01:06.1	15.49
8	0:01:17.0	15.49
9	0:01:28.0	15.49
10	0:01:39.0	15.48
11	0:01:50.0	15.47
12	0:02:01.2	15.47
13	0:02:12.0	15.47
14	0:02:23.0	15.46
15	0:02:34.0	15.46
16	0:02:45.0	15.45
17	0:02:56.0	15.45
18	0:03:07.0	15.45
19	0:03:18.0	15.44
20	0:03:29.0	15.44
21	0:03:40.0	15.44
22	0:03:51.0	15.43
23	0:04:02.0	15.43
24	0:04:13.0	15.43
25	0:04:24.0	15.42
26	0:04:35.0	15.42
27	0:04:46.0	15.42
28	0:04:57.0	15.42
29	0:05:08.0	15.41
30	0:05:19.0	15.42
31	0:05:30.0	15.41
32	0:05:41.0	15.40
33	0:05:52.0	15.40
34	0:06:03.0	15.41
35	0:06:14.0	15.41
36	0:06:25.0	15.40
37	0:06:36.0	15.40
38	0:06:47.0	15.40
39	0:06:58.0	15.40
40	0:07:09.0	15.40
41	0:07:20.0	15.39
42	0:07:31.0	15.39
43	0:07:42.0	15.39
44	0:07:53.0	15.39
45	0:08:04.0	15.38

WELL ID: RTRR - MW-104 Slug In 1

Local ID: MW-104
Date: 8/4/2020
Time:

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	10	Feet

Depths to:

water level (DTW)	10.96	Feet
top of screen (TOS)	9	Feet
Base of Aquifer (DTB)	19	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

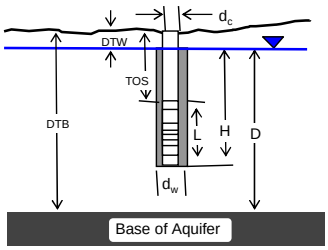
L_{wetted}	8.04	Feet
D =	8.04	Feet
H =	8.04	Feet
L/r_w =	32.16	
$y_{0\text{-DISPLACEMENT}}$ =	1.62	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

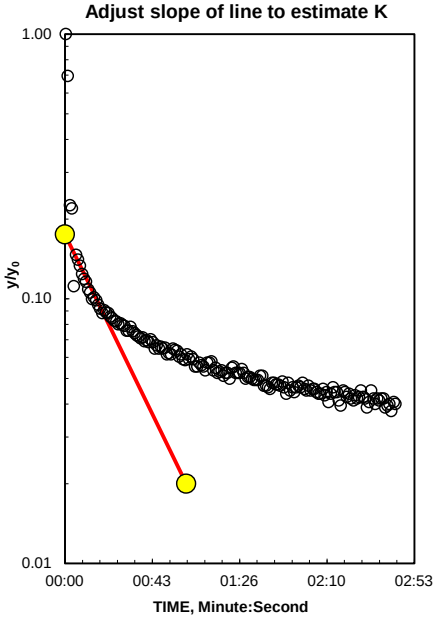
Fully penetrate C =	2.170	
ln(Re/rw) =	2.601	
Re =	3.37	Feet
Slope =	0.0157	$\log_{10}$/sec
$t_{90\%}$ recovery =	64	sec

Input is consistent.

K = 3.5 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

MW-104 is screened in clayey sand.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	12.67
2	0:00:03.0	13.93
3	0:00:06.0	14.06
4	0:00:09.0	14.10
5	0:00:12.0	14.12
6	0:00:15.0	14.13
7	0:00:18.0	14.15
8	0:00:21.0	14.15
9	0:00:24.0	14.16
10	0:00:27.0	14.16
11	0:00:30.0	14.17
12	0:00:33.0	14.17
13	0:00:36.0	14.17
14	0:00:39.0	14.18
15	0:00:42.0	14.18
16	0:00:45.0	14.18
17	0:00:48.0	14.19
18	0:00:51.0	14.19
19	0:00:54.0	14.19
20	0:00:57.0	14.19
21	0:01:00.0	14.19
22	0:01:03.0	14.19
23	0:01:06.0	14.20
24	0:01:09.0	14.20
25	0:01:12.1	14.20
26	0:01:15.0	14.21
27	0:01:18.0	14.21
28	0:01:21.0	14.21
29	0:01:24.0	14.21
30	0:01:27.1	14.20
31	0:01:30.0	14.21
32	0:01:33.0	14.21
33	0:01:36.0	14.21
34	0:01:39.0	14.21
35	0:01:42.1	14.21
36	0:01:45.0	14.21
37	0:01:48.0	14.22
38	0:01:51.0	14.22
39	0:01:54.0	14.22
40	0:01:57.2	14.21
41	0:02:00.0	14.21
42	0:02:03.0	14.22
43	0:02:06.0	14.22
44	0:02:09.0	14.22
45	0:02:12.2	14.22

WELL ID: RTRR - MW-109D Slug In 1

Local ID: RTRR
Date: 8/4/2020
Time:

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	5	Feet

Depths to:

water level (DTW)	20	Feet
top of screen (TOS)	28.9	Feet
Base of Aquifer (DTB)	33.9	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

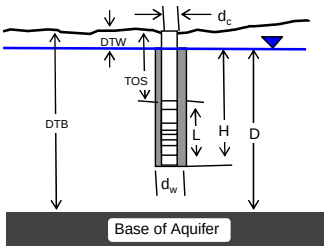
L_{wetted}	5	Feet
D =	13.9	Feet
H =	13.9	Feet
L/r_w =	20.00	
$y_{0\text{-DISPLACEMENT}}$ =	2.21	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

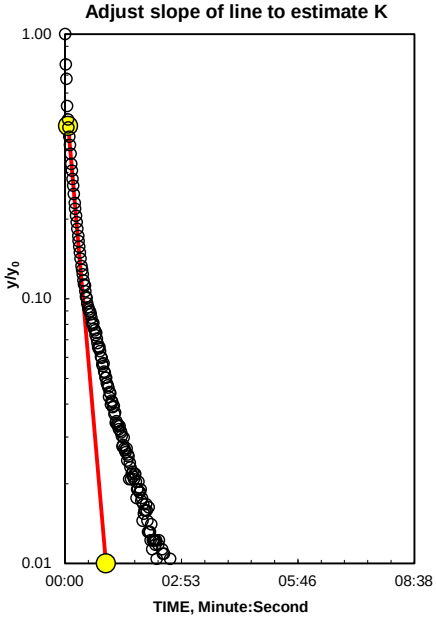
Fully penetrate C =	1.726	
ln(Re/rw) =	2.777	
Re =	4.02	Feet
Slope =	0.029522	$\log_{10}$/sec
$t_{90\%}$ recovery =	34	sec

Input is consistent.

K = 11 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

MW-109D is screened in a fine sand layer. MW-109D and MW-109s are screened in the same water bearing zone.

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:00.0	21.61
2	0:00:10.0	23.14
3	0:00:20.0	23.45
4	0:00:30.0	23.58
5	0:00:40.0	23.64
6	0:00:50.0	23.67
7	0:01:00.0	23.71
8	0:01:10.0	23.73
9	0:01:20.0	23.75
10	0:01:30.0	23.76
11	0:01:40.0	23.77
12	0:01:50.0	23.78
13	0:02:00.0	23.78
14	0:02:10.0	23.79
15	0:02:20.0	23.80
16	0:02:30.0	23.80
17	0:02:40.0	23.80
18	0:02:50.0	23.80
19	0:03:00.0	23.80
20	0:03:10.0	23.81
21	0:03:20.0	23.80
22	0:03:30.0	23.81
23	0:03:40.0	23.81
24	0:03:50.0	23.81
25	0:04:00.0	23.81
26	0:04:10.0	23.81
27	0:04:20.1	23.81
28	0:04:30.0	23.80
29	0:04:40.0	23.81
30	0:04:50.0	23.81
31	0:05:00.0	23.81
32	0:05:10.0	23.80
33	0:05:20.0	23.81
34	0:05:30.0	23.81
35	0:05:40.0	23.81
36	0:05:50.0	23.81
37	0:06:00.0	23.81
38	0:06:10.0	23.81
39	0:06:20.0	23.81
40	0:06:30.0	23.81
41	0:06:40.0	23.81
42	0:06:50.0	23.81
43	0:07:00.0	23.81
44	0:07:10.0	23.81
45	0:07:20.0	23.81

WELL ID: RTRR - MW-109D Slug Out 1

Local ID: MW-109D
Date: 8/4/2020
Time:

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	5	Feet

Depths to:

water level (DTW)	20	Feet
top of screen (TOS)	28.9	Feet
Base of Aquifer (DTB)	33.9	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

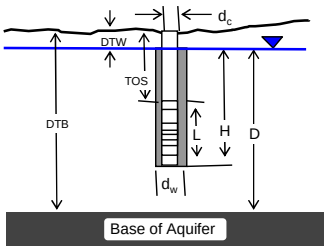
L_{wetted}	5	Feet
D =	13.9	Feet
H =	13.9	Feet
L/r_w =	20.00	
$y_{0\text{-DISPLACEMENT}}$ =	1.67	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

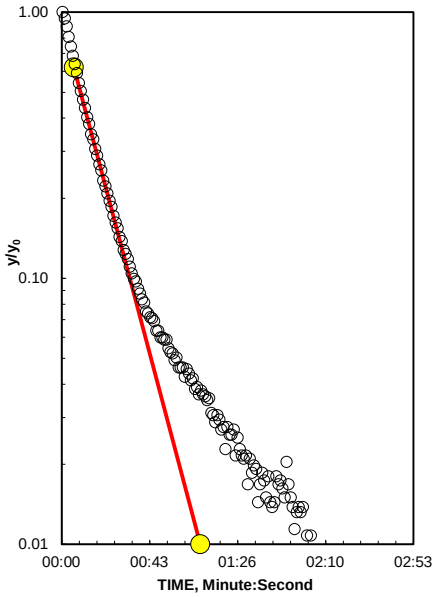
Fully penetrate C =	1.726	
ln(Re/rw) =	2.777	
Re =	4.02	Feet
Slope =	0.02891	$\log_{10}$/sec
$t_{90\%}$ recovery =	35	sec

Input is consistent.

K = 11 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

MW-109D is screened in a fine sand layer. MW-109D and MW-109s are screened in the same water bearing zone.

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:00.0	25.58
2	0:00:03.0	25.25
3	0:00:06.0	24.97
4	0:00:09.0	24.75
5	0:00:12.0	24.58
6	0:00:15.0	24.46
7	0:00:18.0	24.35
8	0:00:21.0	24.28
9	0:00:24.0	24.22
10	0:00:27.0	24.16
11	0:00:30.0	24.12
12	0:00:33.0	24.09
13	0:00:36.0	24.07
14	0:00:39.0	24.05
15	0:00:42.0	24.03
16	0:00:45.0	24.02
17	0:00:48.0	24.01
18	0:00:51.0	24.01
19	0:00:54.0	23.99
20	0:00:57.0	23.98
21	0:01:00.0	23.98
22	0:01:03.0	23.98
23	0:01:06.0	23.97
24	0:01:09.0	23.97
25	0:01:12.0	23.97
26	0:01:15.0	23.96
27	0:01:18.0	23.95
28	0:01:21.0	23.95
29	0:01:24.0	23.95
30	0:01:27.0	23.95
31	0:01:30.0	23.94
32	0:01:33.0	23.94
33	0:01:36.0	23.93
34	0:01:39.1	23.94
35	0:01:42.0	23.93
36	0:01:45.0	23.94
37	0:01:48.0	23.93
38	0:01:51.0	23.94
39	0:01:54.0	23.93
40	0:01:57.0	23.93
41	0:02:00.0	23.93
42	0:02:03.0	23.92
43	0:02:06.0	23.92
44	0:02:09.0	23.92
45	0:02:12.0	23.92

WELL ID: RTRR - MW-109D - Slug In 2

Local ID: MW-109D
Date: 8/4/2020
Time:

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	5	Feet

Depths to:

water level (DTW)	20	Feet
top of screen (TOS)	28.9	Feet
Base of Aquifer (DTB)	33.9	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

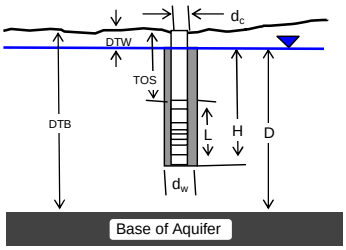
L_{wetted}	5	Feet
D =	13.9	Feet
H =	13.9	Feet
L/r_w =	20.00	
$y_{0\text{-DISPLACEMENT}}$ =	2.39	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

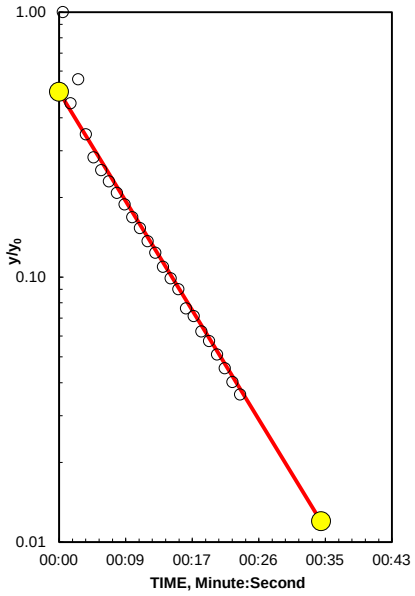
Fully penetrate C =	1.726	
ln(Re/rw) =	2.777	
Re =	4.02	Feet
Slope =	0.047641	$\log_{10}$/sec
$t_{90\%}$ recovery =	21	sec

Input is consistent.

K = 18 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	21.41
2	0:00:01.0	22.72
3	0:00:02.0	22.47
4	0:00:03.0	22.98
5	0:00:04.0	23.13
6	0:00:05.0	23.20
7	0:00:06.0	23.25
8	0:00:07.0	23.30
9	0:00:08.0	23.35
10	0:00:09.0	23.40
11	0:00:10.0	23.44
12	0:00:11.0	23.47
13	0:00:12.0	23.51
14	0:00:13.0	23.54
15	0:00:14.0	23.56
16	0:00:15.0	23.59
17	0:00:16.0	23.62
18	0:00:17.0	23.63
19	0:00:18.0	23.65
20	0:00:19.0	23.66
21	0:00:20.0	23.68
22	0:00:21.0	23.69
23	0:00:22.0	23.70

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

MW-109D is screened in a fine sand layer. MW-109D and MW-109s are screened in the same water bearing zone.

WELL ID: RTRR - MW109D Slug Out 2

Local ID: MW-109D
Date: 8/4/2020
Time: 0:00

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6	Inch
Screen Length (L)	5	Feet

Depths to:

water level (DTW)	23.94	Feet
top of screen (TOS)	28.9	Feet
Base of Aquifer (DTB)	33.9	Feet

Annular Fill:

across screen -- Coarse Sand
above screen -- Bentonite

Aquifer Material -- Fine Sand

COMPUTED

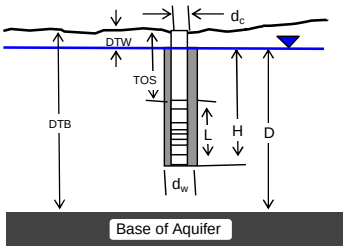
L_{wetted}	5	Feet
D =	9.96	Feet
H =	9.96	Feet
L/r_w =	20.00	
$y_{0\text{-DISPLACEMENT}}$ =	1.68	Feet
$y_{0\text{-SLUG}}$ =	1.95	Feet

From look-up table using L/r_w

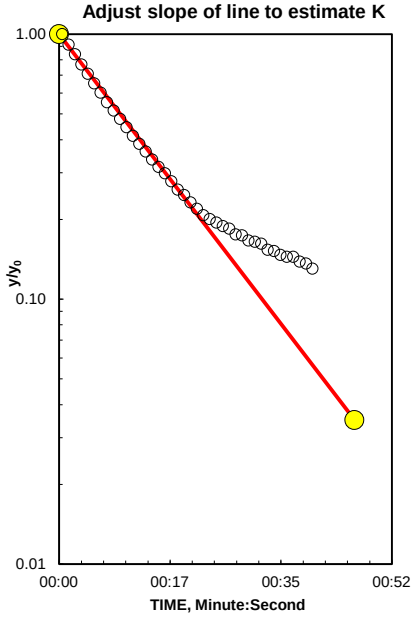
Fully penetrate C =	1.726	
ln(Re/rw) =	2.598	
Re =	3.36	Feet
Slope =	0.031651	$\log_{10}$/sec
$t_{90\%}$ recovery =	32	sec

Input is consistent.

K = 11 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	25.56
2	0:00:01.0	25.42
3	0:00:02.0	25.29
4	0:00:03.0	25.17
5	0:00:04.0	25.07
6	0:00:05.0	24.98
7	0:00:06.0	24.89
8	0:00:07.0	24.81
9	0:00:08.0	24.75
10	0:00:09.0	24.69
11	0:00:10.0	24.63
12	0:00:11.0	24.58
13	0:00:12.0	24.53
14	0:00:13.0	24.49
15	0:00:14.0	24.45
16	0:00:15.0	24.41
17	0:00:16.0	24.38
18	0:00:17.0	24.35
19	0:00:18.0	24.32
20	0:00:19.0	24.30
21	0:00:20.0	24.27
22	0:00:21.0	24.25
23	0:00:22.0	24.23
24	0:00:23.0	24.22
25	0:00:24.0	24.21
26	0:00:25.0	24.20
27	0:00:26.0	24.19
28	0:00:27.0	24.18
29	0:00:28.0	24.17
30	0:00:29.0	24.16
31	0:00:30.0	24.16
32	0:00:31.0	24.15
33	0:00:32.0	24.14
34	0:00:33.0	24.14
35	0:00:34.0	24.13
36	0:00:35.0	24.12
37	0:00:36.0	24.12
38	0:00:37.0	24.11
39	0:00:38.0	24.11

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

MW-109D is screened in a fine sand layer. MW-109D and MW-109s are screened in the same water bearing zone.

Attachment C

Laboratory Analytical Reports and Chain of Custody Forms

Fibertec
environmental
services

Thursday, December 26, 2019

Fibertec Project Number:	94159
Project Identification:	1-10860 /1-10860
Submittal Date:	12/12/2019

Ms. Allison Rogowski
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Ms. Rogowski,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Stephannie Wallace

By Stephannie Wallace at 1:29 PM, Dec 26, 2019

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-121119**	Chain of Custody:	**184895**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94159-001D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	12/17/19	PW19L17C	12/17/19	WQ19L17A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94159-001E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**33**		µg/L	5.0	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
2. Barium	U		µg/L	100	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
3. Chromium	U		µg/L	10	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
4. Copper	U		µg/L	4.0	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
5. Lead	U		µg/L	3.0	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
6. Manganese	U		µg/L	50	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
7. Nickel	U		µg/L	20	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
8. Selenium	U		µg/L	5.0	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
9. Silver	U		µg/L	0.20	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA
10. Vanadium	**4.6**		µg/L	4.0	10	12/16/19	PT19L16D	12/20/19	T419L20C	CJA
11. Zinc	U		µg/L	50	10	12/16/19	PT19L16D	12/17/19	T419L17A	CJA

Mercury by CVAAS, Total **Aliquot ID: 94159-001E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94159-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-121119**	Chain of Custody:	**184895**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94159-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94159-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 2. Acrylonitrile	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
3. Benzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
4. Bromobenzene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
5. Bromochloromethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
6. Bromodichloromethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
7. Bromoform	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
8. Bromomethane	U		µg/L	10	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
9. 2-Butanone	U		µg/L	25	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
10. n-Butylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
11. sec-Butylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
12. tert-Butylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
14. Carbon Tetrachloride	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
15. Chlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
16. Chloroethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
17. Chloroform	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
18. Chloromethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
22. Dibromomethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
27. 1,1-Dichloroethane	**15**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
28. 1,2-Dichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
29. 1,1-Dichloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-121119**	Chain of Custody:	**184895**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94159-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
32. 1,2-Dichloropropane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
35. Ethylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
36. Ethylene Dibromide	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
37. 2-Hexanone	U		µg/L	50	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
40. Methylene Chloride	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	15	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
42. MTBE	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
43. Naphthalene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
44. n-Propylbenzene	U	L+	µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
45. Styrene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
48. Tetrachloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
49. Toluene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	10	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
53. Trichloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
54. Trichlorofluoromethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
59. Vinyl Chloride	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
60. m&p-Xylene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
61. o-Xylene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 62. Xylenes	U		µg/L	7.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-121119**	Chain of Custody:	**184895**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94159-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
3. Aniline	U	L+	µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
28. 2,4-Dimethylphenol	**630**		µg/L	20	20	12/16/19	PS19L16D	12/17/19	S519L17B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-121119**	Chain of Custody:	**184895**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94159-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
43. 2-Methylphenol	**10**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 44. 3&4-Methylphenol	**70**		µg/L	10	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
61. Pyridine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
62. 1,2,4-Trichlorobenzene	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

pH, Electrometric **Aliquot ID: 94159-001B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.0**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 14:21	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-121119**	Chain of Custody:	**184895**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94159-001B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**300000**		µg/L	10000	5.0	12/17/19	PW19L16B	12/17/19	WC19L16A	SEM

Residue, Filterable (TDS) **Aliquot ID: 94159-001A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**860000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94159-001C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-104-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**24000**		µg/L	50	5.0	12/17/19	PW19L17B	12/17/19	WU19L17B	SEM

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

H : Hold time exceeded.
L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Thursday, December 26, 2019

Fibertec Project Number: 94161
Project Identification: 1-10860 /1-10860
Submittal Date: 12/12/2019

Ms. Allison Rogowski
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Ms. Rogowski,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Upon receipt, the pH for sample 3's metals container exceeded criteria of ≤2 and was adjusted in the lab.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Stephan. Wallace

By Stephannie Wallace at 1:24 PM, Dec 26, 2019

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94161-001D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0065**		mg/L	0.0050	1.0	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94161-001E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**38**		µg/L	5.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
2. Barium	**120**		µg/L	100	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94161-001E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18C	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94161-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
2. Aroclor-1221	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
3. Aroclor-1232	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
4. Aroclor-1242	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
5. Aroclor-1248	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
6. Aroclor-1254	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
7. Aroclor-1260	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94161-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK
‡ 9. Aroclor-1268	U	G-	µg/L	0.20	1.1	12/17/19	PS19L17F	12/18/19	SA19L18A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94161-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
3. Benzene	**13**	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
4. Bromobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
5. Bromochloromethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
6. Bromodichloromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
7. Bromoform	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
8. Bromomethane	U	Y1	µg/L	25	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
9. 2-Butanone	U	Y1	µg/L	25	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
10. n-Butylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
11. sec-Butylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
15. Chlorobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
16. Chloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
17. Chloroform	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
18. Chloromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94161-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**5.5**	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
37. 2-Hexanone	U	Y1	µg/L	50	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 41. 2-Methylnaphthalene	**5.5**	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
42. MTBE	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
43. Naphthalene	**42**	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
45. Styrene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
49. Toluene	**4.0**	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
52. 1,1,2-Trichloroethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 56. 1,2,3-Trimethylbenzene	**3.3**	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
58. 1,3,5-Trimethylbenzene	**4.8**	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
59. Vinyl Chloride	**7.5**	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
60. m&p-Xylene	**9.9**	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
61. o-Xylene	**4.7**	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 62. Xylenes	**15**	Y1	µg/L	7.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94161-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
3. Aniline	U	L+	µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
28. 2,4-Dimethylphenol	**18**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
33. Fluoranthene	**1.1**		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94161-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 44. 3&4-Methylphenol	**17**		µg/L	10	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
45. Naphthalene	**26**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
58. Phenanthrene	**4.4**		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
59. Phenol	**12**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
61. Pyridine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
62. 1,2,4-Trichlorobenzene	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

pH, Electrometric **Aliquot ID: 94161-001B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100S-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 14:24	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94161-001B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100S-121019**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**54000**		µg/L	10000	1.0	12/16/19	PW19L16B	12/16/19	WC19L16A	SEM

Residue, Filterable (TDS) **Aliquot ID: 94161-001A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100S-121019**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1300000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94161-001C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100S-121019**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**9000**		µg/L	10	1.0	12/17/19	PW19L17B	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94161-002D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.74**		mg/L	0.050	10	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94161-002E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**100**		µg/L	5.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
2. Barium	U		µg/L	100	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
5. Lead	**3.3**		µg/L	3.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
6. Manganese	**86**		µg/L	50	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
8. Selenium	**6.4**		µg/L	5.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
10. Vanadium	**12**		µg/L	4.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94161-002E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18C	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94161-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94161-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/18/19	SF19L18A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94161-002F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 2. Acrylonitrile	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
3. Benzene	**38**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
4. Bromobenzene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
5. Bromochloromethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
6. Bromodichloromethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
7. Bromoform	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
8. Bromomethane	U		µg/L	10	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
9. 2-Butanone	U		µg/L	25	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
10. n-Butylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
11. sec-Butylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
12. tert-Butylbenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
13. Carbon Disulfide	**34**		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
14. Carbon Tetrachloride	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
15. Chlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
16. Chloroethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
17. Chloroform	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
18. Chloromethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
22. Dibromomethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
27. 1,1-Dichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
28. 1,2-Dichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
29. 1,1-Dichloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94161-002F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**21**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
32. 1,2-Dichloropropane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
35. Ethylbenzene	**3.1**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
36. Ethylene Dibromide	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
37. 2-Hexanone	U		µg/L	50	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
40. Methylene Chloride	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	15	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
42. MTBE	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
43. Naphthalene	**25**		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
44. n-Propylbenzene	U	L+	µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
45. Styrene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
48. Tetrachloroethene	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
49. Toluene	**7.5**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	10	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
53. Trichloroethene	**5.0**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
54. Trichlorofluoromethane	U		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	**6.0**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
57. 1,2,4-Trimethylbenzene	**8.0**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
58. 1,3,5-Trimethylbenzene	**12**	E1	µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
59. Vinyl Chloride	**29**		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
60. m&p-Xylene	**17**		µg/L	5.0	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
61. o-Xylene	**7.8**		µg/L	2.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ
‡ 62. Xylenes	**25**		µg/L	7.5	5.0	12/16/19	VM19L16A	12/16/19	VM19L16A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94161-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
3. Aniline	U	L+	µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 18. Carbazole	**12**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
28. 2,4-Dimethylphenol	**24**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
33. Fluoranthene	**1.9**		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94161-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
43. 2-Methylphenol	**18**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 44. 3&4-Methylphenol	**110**		µg/L	10	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
45. Naphthalene	**17**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
58. Phenanthrene	**3.4**		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
59. Phenol	**77**		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
61. Pyridine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
62. 1,2,4-Trichlorobenzene	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

pH, Electrometric **Aliquot ID: 94161-002B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100i-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.7**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 14:25	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94161-002B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100i-121019**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**200000**		µg/L	10000	5.0	12/17/19	PW19L16B	12/17/19	WC19L16A	SEM

Residue, Filterable (TDS) **Aliquot ID: 94161-002A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100i-121019**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**2100000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94161-002C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100i-121019**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**33000**		µg/L	50	5.0	12/17/19	PW19L17B	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94161-003D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94161-003E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
2. Barium	**250**		µg/L	100	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
3. Chromium	**17**		µg/L	10	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
4. Copper	**6.4**		µg/L	4.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
5. Lead	**4.7**		µg/L	3.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/17/19	PT19L17C	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94161-003E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18C	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94161-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94161-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/17/19	PS19L17F	12/17/19	SA19L17A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94161-003F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
3. Benzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
4. Bromobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
5. Bromochloromethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
6. Bromodichloromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
7. Bromoform	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
8. Bromomethane	U	Y1	µg/L	25	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
9. 2-Butanone	U	Y1	µg/L	25	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
10. n-Butylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
11. sec-Butylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
15. Chlorobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
16. Chloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
17. Chloroform	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
18. Chloromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94161-003F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
37. 2-Hexanone	U	Y1	µg/L	50	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
42. MTBE	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
43. Naphthalene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
45. Styrene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
49. Toluene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
52. 1,1,2-Trichloroethane	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
59. Vinyl Chloride	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
60. m&p-Xylene	U	Y1	µg/L	5.0	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
61. o-Xylene	U	Y1	µg/L	2.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM
‡ 62. Xylenes	U	Y1	µg/L	7.5	5.0	12/17/19	VP19L17B	12/17/19	VP19L17B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94161-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
3. Aniline	U	L+	µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94161-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
61. Pyridine	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
62. 1,2,4-Trichlorobenzene	U	L-	µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/16/19	PS19L16D	12/16/19	S619L16B	GJP

pH, Electrometric **Aliquot ID: 94161-003B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	E	pH Units	-1.00	1.0	NA	NA	12/18/19 14:32	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-121019**	Chain of Custody:	**184894**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/10/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94161-003B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**43000**		µg/L	10000	1.0	12/16/19	PW19L16B	12/16/19	WC19L16A	SEM

Residue, Filterable (TDS) **Aliquot ID: 94161-003A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94161-003C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-106-121019**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**2000**		µg/L	10	1.0	12/17/19	PW19L17B	12/17/19	WU19L17B	SEM

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

E : This flag identifies compounds whose response exceed the response of the highest standard in the initial calibration range of the instrument for that specific analysis.
E1 : The reported value is estimated due to the presence of interference.
G- : Recovery of the associated Surrogate Compound exceeds the lower control limit. Results may be biased low.
H : Hold time exceeded.
L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
Y1 : Sample was diluted due to a sample matrix issue.

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Thursday, December 26, 2019

Fibertec Project Number: 94192
Project Identification: 1-10860 /1-10860
Submittal Date: 12/13/2019

Ms. Allison Rogowski
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Ms. Rogowski,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Upon receipt, the pH for samples -002, -006, and -008 metals container exceeded criteria of ≤2 and was adjusted in the lab.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

Stephanie Wallace

By Stephannie Wallace at 1:46 PM, Dec 26, 2019

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-001D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-001E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**110**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	**3.1**		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	**190**		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	**4.0**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-001E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

pH, Electrometric **Aliquot ID: 94192-001B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-102D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.18**	H	pH Units	-1.00	1.0	NA	NA	12/17/19 00:00	WD19L17A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-001B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-102D-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**15000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-001A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-102D-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**350000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-001C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-102D-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**100**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-002D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.54**		mg/L	0.10	20	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-002E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**440**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	**6.4**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	**3.4**		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	**110**		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	**4.2**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-002E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-002F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	**4.7**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-002F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	**22**		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	**52**		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	**1.1**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	**1.4**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
28. 2,4-Dimethylphenol	**60**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
33. Fluoranthene	**1.2**		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
42. 2-Methylnaphthalene	**15**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
45. Naphthalene	**24**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
58. Phenanthrene	**4.7**		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
59. Phenol	**7.3**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

pH, Electrometric **Aliquot ID: 94192-002B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 14:47	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-002B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**25000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-002A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-002C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-103-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**4100**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-003D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**4.0**		mg/L	0.20	40	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-003E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**6.4**		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	U		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	**4.9**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-003E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-003F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
3. Benzene	**1.6**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
15. Chlorobenzene	**1.0**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
23. 1,2-Dichlorobenzene	**4.3**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
27. 1,1-Dichloroethane	**3.2**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-003F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 41. 2-Methylnaphthalene	**9.6**		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
43. Naphthalene	**110**		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
44. n-Propylbenzene	U	L+	µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
49. Toluene	**3.1**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	**4.6**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
57. 1,2,4-Trimethylbenzene	**3.8**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
58. 1,3,5-Trimethylbenzene	**1.4**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
60. m&p-Xylene	**3.0**		µg/L	2.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
61. o-Xylene	**2.9**		µg/L	1.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 62. Xylenes	**5.9**		µg/L	3.0	1.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
28. 2,4-Dimethylphenol	**180**		µg/L	20	20	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
42. 2-Methylnaphthalene	**5.4**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
43. 2-Methylphenol	**8.3**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 44. 3&4-Methylphenol	**110**		µg/L	10	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
45. Naphthalene	**67**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
59. Phenol	**24**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

pH, Electrometric **Aliquot ID: 94192-003B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.0**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:16	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-003B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107S-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**24000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-003A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107S-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**670000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-003C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107S-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**13000**		µg/L	20	2.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-004D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.2**		mg/L	0.10	20	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-004E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	U		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-004E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-004F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-004F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/18/19	S519L18B	GJP

pH, Electrometric **Aliquot ID: 94192-004B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.54**	H	pH Units	-1.00	1.0	NA	NA	12/17/19 00:00	WD19L17A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-004B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107D-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**22000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-004A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107D-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**360000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-004C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107D-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**560**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-005D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.018**		mg/L	0.0050	1.0	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-005E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**390**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	**19**		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	**10**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	**15**		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-005E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-005F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-005F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-005B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-108-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:20	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-005B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-108-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**27000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-005A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-108-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1200000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-005C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-108-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**2000**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-006D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.026**		mg/L	0.0050	1.0	12/17/19	PW19L17C	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-006E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**490**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-006E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-006F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 2. Acrylonitrile	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
3. Benzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
4. Bromobenzene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
5. Bromochloromethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
6. Bromodichloromethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
7. Bromoform	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
8. Bromomethane	U		µg/L	10	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
9. 2-Butanone	U		µg/L	25	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
10. n-Butylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
11. sec-Butylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
12. tert-Butylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
14. Carbon Tetrachloride	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
15. Chlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
16. Chloroethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
17. Chloroform	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
18. Chloromethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
22. Dibromomethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
27. 1,1-Dichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
28. 1,2-Dichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
29. 1,1-Dichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-006F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
32. 1,2-Dichloropropane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
35. Ethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
36. Ethylene Dibromide	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
37. 2-Hexanone	U		µg/L	50	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
40. Methylene Chloride	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	15	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
42. MTBE	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
43. Naphthalene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
44. n-Propylbenzene	U	L+	µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
45. Styrene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
48. Tetrachloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
49. Toluene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	10	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
53. Trichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
54. Trichlorofluoromethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
59. Vinyl Chloride	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
60. m&p-Xylene	**5.6**		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
61. o-Xylene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 62. Xylenes	U		µg/L	7.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	**2.2**		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-006B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.6**	E	pH Units	-1.00	1.0	NA	NA	12/18/19 15:22	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-006B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**30000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-006A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**2000000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-006C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-109D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3600**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **94192-007D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	12/17/19	PW19L17D	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **94192-007E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**290**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	**45**		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	**4.2**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID:** **94192-007E** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **94192-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/20/19	SA19L20A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-007F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-007F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-007B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.3**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:24	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-007B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**47000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-007A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1200000**		µg/L	50000	1.3	12/16/19	WH19L16C	12/17/19	WH19L16C	AMW

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-007C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110S-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**4300**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-008D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	12/17/19	PW19L17D	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-008E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**520**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	**16**		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	**4.0**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-008E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-008F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 2. Acrylonitrile	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
3. Benzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
4. Bromobenzene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
5. Bromochloromethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
6. Bromodichloromethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
7. Bromoform	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
8. Bromomethane	U		µg/L	10	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
9. 2-Butanone	U		µg/L	25	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
10. n-Butylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
11. sec-Butylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
12. tert-Butylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
14. Carbon Tetrachloride	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
15. Chlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
16. Chloroethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
17. Chloroform	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
18. Chloromethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
22. Dibromomethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
27. 1,1-Dichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
28. 1,2-Dichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
29. 1,1-Dichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-008F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
32. 1,2-Dichloropropane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
35. Ethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
36. Ethylene Dibromide	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
37. 2-Hexanone	U		µg/L	50	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
40. Methylene Chloride	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	15	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
42. MTBE	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
43. Naphthalene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
44. n-Propylbenzene	U	L+	µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
45. Styrene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
48. Tetrachloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
49. Toluene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	10	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
53. Trichloroethene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
54. Trichlorofluoromethane	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
59. Vinyl Chloride	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
60. m&p-Xylene	U		µg/L	5.0	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
61. o-Xylene	U		µg/L	2.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ
‡ 62. Xylenes	U		µg/L	7.5	5.0	12/19/19	VM19L19A	12/19/19	VM19L19A	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-008B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110D-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	E	pH Units	-1.00	1.0	NA	NA	12/18/19 15:34	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-008B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110D-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**38000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-008A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110D-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1700000**	H	µg/L	51000	1.3	12/20/19	WH19L20B	12/23/19	WH19L20B	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-008C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110D-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**3600**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-009D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.7**		mg/L	0.050	10	12/17/19	PW19L17D	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-009E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**6.0**		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**120**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	**11**		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	**54**		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-009E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-009F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	**3.2**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	**1.9**	E1	µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-009F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	**5.9**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	**11**		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	**4.3**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	**1.7**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	**29**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	**51**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	**13**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	**28**		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	**13**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	**41**		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	**7.0**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-009B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-101-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.3**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:45	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-009B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-101-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**55000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-009A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-101-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**500000**	H	µg/L	50000	1.3	12/20/19	WH19L20B	12/23/19	WH19L20B	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-009C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-101-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**3800**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-010D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.013**		mg/L	0.0050	1.0	12/17/19	PW19L17D	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-010E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**140**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	**33**		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	**12**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-010E** **Matrix: Ground Water**
Method: EPA 7470A **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-010F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-010F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-010B** **Matrix: Ground Water**
Method: EPA 9040C **Description: TMW-26-121219**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.7**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:42	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-121219**	Chain of Custody:	**181434**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-010B** **Matrix: Ground Water**
Method: EPA 9056A **Description: TMW-26-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-010A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: TMW-26-121219**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**710000**	H	µg/L	51000	1.3	12/20/19	WH19L20B	12/23/19	WH19L20B	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-010C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: TMW-26-121219**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**2700**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 94192-011D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	12/17/19	PW19L17D	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 94192-011E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	**290**		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	**47**		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	**13**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	U		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID: 94192-011E** **Matrix: Ground Water**
Method: EPA 7470A **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-011F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-011F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-011B** **Matrix: Ground Water**
Method: EPA 9040C **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:53	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/12/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-011B** **Matrix: Ground Water**
Method: EPA 9056A **Description: DUP-MW**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**48000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-011A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: DUP-MW**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1200000**	H	µg/L	50000	1.3	12/20/19	WH19L20B	12/23/19	WH19L20B	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-011C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: DUP-MW**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**4300**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-121119**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **94192-012D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.17**		mg/L	0.025	5.0	12/17/19	PW19L17D	12/17/19	WQ19L17C	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **94192-012E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8.4**		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
2. Barium	U		µg/L	100	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
3. Chromium	U		µg/L	10	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
4. Copper	U		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
5. Lead	**3.4**		µg/L	3.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
6. Manganese	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
7. Nickel	U		µg/L	20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
8. Selenium	U		µg/L	5.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
9. Silver	U		µg/L	0.20	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
10. Vanadium	**9.3**		µg/L	4.0	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA
11. Zinc	U		µg/L	50	10	12/18/19	PT19L18D	12/19/19	T419L19B	CJA

Mercury by CVAAS, Total **Aliquot ID:** **94192-012E** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	12/18/19	PM19L18A	12/18/19	M719L18A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **94192-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-121119**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 94192-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	12/19/19	PS19L19A	12/21/19	SF19L21B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-012F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
3. Benzene	**1.1**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
4. Bromobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
5. Bromochloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
6. Bromodichloromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
7. Bromoform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
8. Bromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
9. 2-Butanone	U		µg/L	25	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
10. n-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
11. sec-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
12. tert-Butylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
13. Carbon Disulfide	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
15. Chlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
16. Chloroethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
17. Chloroform	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
18. Chloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
21. Dibromochloromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
22. Dibromomethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-121119**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 94192-012F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
35. Ethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
36. Ethylene Dibromide	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
37. 2-Hexanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
38. Isopropylbenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
40. Methylene Chloride	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
42. MTBE	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
43. Naphthalene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
44. n-Propylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
45. Styrene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
48. Tetrachloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
49. Toluene	**4.7**		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
53. Trichloroethene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
59. Vinyl Chloride	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
60. m&p-Xylene	U		µg/L	2.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
61. o-Xylene	U		µg/L	1.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ
‡ 62. Xylenes	U		µg/L	3.0	1.0	12/18/19	VB19L18B	12/18/19	VB19L18B	ZJJ

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-121119**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
3. Aniline	U	V-	µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
4. Anthracene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
23. Chrysene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
28. 2,4-Dimethylphenol	**34**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
34. Fluorene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-121119**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 94192-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
40. Isophorone	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
43. 2-Methylphenol	**6.6**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
‡ 44. 3&4-Methylphenol	**29**		µg/L	10	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
59. Phenol	**30**		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
60. Pyrene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	12/18/19	PS19L18E	12/19/19	S519L19B	GJP

pH, Electrometric **Aliquot ID: 94192-012B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.7**	H	pH Units	-1.00	1.0	NA	NA	12/18/19 15:55	WD19L18A	CMB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-121119**	Chain of Custody:	**181435**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**12/11/19**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 94192-012B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**40000**		µg/L	10000	1.0	12/17/19	PW19L17E	12/17/19	WC19L17A	VO

Residue, Filterable (TDS) **Aliquot ID: 94192-012A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**610000**	H	µg/L	50000	1.3	12/20/19	WH19L20B	12/23/19	WH19L20B	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 94192-012C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-105-121119**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**8000**		µg/L	10	1.0	12/17/19	PW19L17A	12/17/19	WU19L17B	SEM

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

E : This flag identifies compounds whose response exceed the response of the highest standard in the initial calibration range of the instrument for that specific analysis.
E1 : The reported value is estimated due to the presence of interference.
H : Hold time exceeded.
L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Tuesday, April 07, 2020

Fibertec Project Number:	95575
Project Identification:	1-10860 /1-10860
Submittal Date:	03/20/2020

Ms. Allison Rogowski
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Ms. Rogowski,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Rikki Lott at 3:30 PM, Apr 07, 2020

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-001C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**3.2**		mg/L	0.50	100	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-001D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**18**		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	U		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	U		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	U		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-001D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-001E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 2. Acrylonitrile	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
3. Benzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
5. Bromochloromethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
7. Bromoform	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
8. Bromomethane	U	Y1	µg/L	10	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
9. 2-Butanone	U	Y1	µg/L	25	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
14. Carbon Tetrachloride	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
16. Chloroethane	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
17. Chloroform	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
18. Chloromethane	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
25. 1,4-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
27. 1,1-Dichloroethane	**21**	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-001E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
37. 2-Hexanone	U	Y1	µg/L	50	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	15	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
42. MTBE	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
43. Naphthalene	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
45. Styrene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
49. Toluene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	10	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
55. 1,2,3-Trichloropropane	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
59. Vinyl Chloride	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
60. m&p-Xylene	U	Y1	µg/L	5.0	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
61. o-Xylene	U	Y1	µg/L	2.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 62. Xylenes	U	Y1	µg/L	7.5	5.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	**360**		µg/L	20	20	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	**10**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	**98**		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	U	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-001A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-104-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.0**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:32	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-001A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-104-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**310000**		µg/L	10000	5.0	03/25/20	PW20C24B	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-001A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-104-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**920000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-001B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-104-031820**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**19000**		µg/L	20	2.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-002C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.2**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-002D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5.5**		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	**130**		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	U		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	U		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-002D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-002E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
10. n-Butylbenzene	**2.7**	E1	µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
11. sec-Butylbenzene	**1.7**	E1	µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-002E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
35. Ethylbenzene	**5.1**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
43. Naphthalene	**7.6**		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
44. n-Propylbenzene	**4.1**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
49. Toluene	**1.6**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 56. 1,2,3-Trimethylbenzene	**25**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
57. 1,2,4-Trimethylbenzene	**40**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
58. 1,3,5-Trimethylbenzene	**11**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
60. m&p-Xylene	**23**		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
61. o-Xylene	**10.0**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 62. Xylenes	**33**		µg/L	3.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
2. Acenaphthylene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
3. Aniline	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
4. Anthracene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
‡ 5. Azobenzene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
6. Benzo(a)anthracene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
7. Benzo(a)pyrene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
9. Benzo(ghi)perylene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
11. Benzyl Alcohol	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
‡ 18. Carbazole	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
21. 2-Chlorophenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
23. Chrysene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
25. Dibenzofuran	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
30. 2,4-Dinitrophenol	U		µg/L	100	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
33. Fluoranthene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
34. Fluorene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
35. Hexachlorobenzene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
36. Hexachlorobutadiene	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
40. Isophorone	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	50	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
43. 2-Methylphenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
45. Naphthalene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
46. 2-Nitroaniline	U		µg/L	20	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
47. 3-Nitroaniline	U		µg/L	20	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
49. Nitrobenzene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
51. 4-Nitrophenol	U	L+	µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
52. N-Nitrosodimethylamine	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
57. Pentachlorophenol	U	V-	µg/L	100	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
58. Phenanthrene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
59. Phenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
60. Pyrene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
61. Pyridine	U	L-	µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP

pH, Electrometric **Aliquot ID: 95575-002A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-101-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.7**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:35	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-002A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-101-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**64000**		µg/L	10000	1.0	03/24/20	PW20C24B	03/24/20	WC20C24A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-002A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-101-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**520000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-002B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-101-031820**

							Preparation		Analysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Ammonia-N	**3200**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-003C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0052**		mg/L	0.0050	1.0	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-003D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	U		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	**20**		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	**9.4**		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	U		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	**4.1**	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-003D** **Matrix: Ground Water**
Method: EPA 7470A **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-003E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-003E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	U	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-003A** **Matrix: Ground Water**
Method: EPA 9040C **Description: TMW-26-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.1**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:37	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-003A** **Matrix: Ground Water**
Method: EPA 9056A **Description: TMW-26-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/L	10000	1.0	03/24/20	PW20C24B	03/24/20	WC20C24A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-003A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: TMW-26-031820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**640000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-003B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: TMW-26-031820**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**1900**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-004C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.31**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-004D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**210**		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	U		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	**6.2**		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	**6.4**		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	**75**		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	**13**	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-004D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-004E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U	Y1	µg/L	10	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	**26**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U	Y1	µg/L	10	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U	Y1	µg/L	20	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U	Y1	µg/L	25	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	**25**	Y1	µg/L	10	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U	Y1	µg/L	10	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-004E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**20**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U	Y1	µg/L	50	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	30	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	**11**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	**5.9**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	20	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	**5.6**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	**8.7**	E1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	**21**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	**12**	Y1	µg/L	10	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	**5.6**	Y1	µg/L	5.0	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	**17**	Y1	µg/L	15	10	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	**7.1**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	**14**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	**1.6**		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	**18**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	**48**		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	**11**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	**3.5**	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	**44**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-004A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100i-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**10.7**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:39	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-004A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100i-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**110000**		µg/L	10000	2.0	03/25/20	PW20C24B	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-004A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100i-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**2400000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-004B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100i-031920**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**21000**		µg/L	40	4.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-005C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.5**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-005D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	**400**		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	U		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	U		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	**4.2**	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-005D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-103-031920**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/25/20	SF20C25B	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-005E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-031920**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
	1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡	2. Acrylonitrile	U		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	3. Benzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	4. Bromobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	5. Bromochloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	6. Bromodichloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	7. Bromoform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	8. Bromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	9. 2-Butanone	U		µg/L	25	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	10. n-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	13. Carbon Disulfide	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	15. Chlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	16. Chloroethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	17. Chloroform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	18. Chloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	21. Dibromochloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	22. Dibromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	27. 1,1-Dichloroethane	**3.7**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
	29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 95575
Laboratory Sample Number: 95575-005

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-005E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 41. 2-Methylnaphthalene	**14**		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
43. Naphthalene	**23**		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
53. Trichloroethene	**1.0**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
2. Acenaphthylene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
3. Aniline	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
4. Anthracene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
‡ 5. Azobenzene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
6. Benzo(a)anthracene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
7. Benzo(a)pyrene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
9. Benzo(ghi)perylene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
11. Benzyl Alcohol	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
‡ 18. Carbazole	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
21. 2-Chlorophenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
23. Chrysene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
25. Dibenzofuran	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
28. 2,4-Dimethylphenol	**30**		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
30. 2,4-Dinitrophenol	U		µg/L	100	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
33. Fluoranthene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
34. Fluorene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
35. Hexachlorobenzene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
36. Hexachlorobutadiene	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
40. Isophorone	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	50	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
42. 2-Methylnaphthalene	**13**		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
43. 2-Methylphenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
45. Naphthalene	**18**		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
46. 2-Nitroaniline	U		µg/L	20	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
47. 3-Nitroaniline	U		µg/L	20	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
49. Nitrobenzene	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
51. 4-Nitrophenol	U	L+	µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
52. N-Nitrosodimethylamine	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
57. Pentachlorophenol	U	V-	µg/L	100	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
58. Phenanthrene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
59. Phenol	**9.6**		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
60. Pyrene	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
61. Pyridine	U	L-	µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	25	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	5.0	5.0	03/24/20	PS20C24A	03/25/20	SN20C25A	GJP

pH, Electrometric **Aliquot ID: 95575-005A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-103-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:42	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-005A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-103-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**25000**		µg/L	10000	1.0	03/24/20	PW20C24B	03/24/20	WC20C24A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-005A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-103-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-005B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-103-031920**

							Preparation		Analysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Ammonia-N	**2500**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-006C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.2**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-006D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**51**		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	**190**		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	U		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	U		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-006D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/25/20	PS20C25C	03/26/20	SF20C26A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-006E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
3. Benzene	**18**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
23. 1,2-Dichlorobenzene	**1.8**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-006E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**3.3**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
35. Ethylbenzene	**2.2**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 41. 2-Methylnaphthalene	**5.8**		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
43. Naphthalene	**55**		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
44. n-Propylbenzene	**1.9**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
49. Toluene	**5.0**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 56. 1,2,3-Trimethylbenzene	**3.0**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
57. 1,2,4-Trimethylbenzene	**4.6**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
58. 1,3,5-Trimethylbenzene	**4.4**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
59. Vinyl Chloride	**4.5**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
60. m&p-Xylene	**13**		µg/L	2.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
61. o-Xylene	**6.2**		µg/L	1.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF
‡ 62. Xylenes	**19**		µg/L	3.0	1.0	03/23/20	VM20C23A	03/23/20	VM20C23A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	**29**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	**45**		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	**42**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	**4.1**	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	**23**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-006A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:44	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-006A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100S-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**79000**		µg/L	10000	1.0	03/24/20	PW20C24B	03/24/20	WC20C24A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-006A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100S-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1400000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-006B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100S-031920**

							Preparation		Analysis	
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Ammonia-N	**9100**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-007C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.11**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-007D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	U		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	U		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	U		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-007D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/24/20	PM20C24B	03/24/20	M720C24B	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-007E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-007E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	U	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-007A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.08**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 14:17	WD20C24A	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-007A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**16000**		µg/L	10000	1.0	03/24/20	PW20C24B	03/24/20	WC20C24A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-007A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**320000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-007B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-102D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**61**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-008C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.072**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-008D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
2. Barium	**520**		µg/L	100	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
3. Chromium	U		µg/L	10	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
4. Copper	U		µg/L	4.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
5. Lead	U		µg/L	3.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
6. Manganese	**120**		µg/L	50	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
9. Silver	U		µg/L	0.20	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/25/20	PT20C25A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/25/20	PT20C25A	03/25/20	T420C25A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-008D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-008E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 2. Acrylonitrile	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
3. Benzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
5. Bromochloromethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
7. Bromoform	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
8. Bromomethane	U	Y1	µg/L	10	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
9. 2-Butanone	U	Y1	µg/L	25	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
14. Carbon Tetrachloride	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
16. Chloroethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
17. Chloroform	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
18. Chloromethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
25. 1,4-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
27. 1,1-Dichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-008E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
37. 2-Hexanone	U	Y1	µg/L	50	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	15	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
42. MTBE	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
43. Naphthalene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
45. Styrene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
49. Toluene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	10	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
55. 1,2,3-Trichloropropane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
59. Vinyl Chloride	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
60. m&p-Xylene	**6.3**	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
61. o-Xylene	**2.8**	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 62. Xylenes	**9.1**	Y1	µg/L	7.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	**2.3**	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-008A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.6**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:48	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-031820**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-008A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**32000**		µg/L	10000	1.0	03/24/20	PW20C24B	03/24/20	WC20C24A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-008A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**2000000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-008B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-109D-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**2900**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW107D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-009C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.51**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-009D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	U		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	U		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	**4.9**		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	U		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	**79**		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-009D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW107D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-009E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW107D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-009E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW107D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW107D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	U	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-009A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.12**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 14:27	WD20C24A	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW107D-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-009A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**24000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-009A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**380000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-009B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW107D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**430**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-010C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**4.0**		mg/L	0.50	100	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-010D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	U		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	U		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	U		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	U		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-010D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
2. Aroclor-1221	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
3. Aroclor-1232	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
4. Aroclor-1242	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
5. Aroclor-1248	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
6. Aroclor-1254	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
7. Aroclor-1260	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/31/20	SF20C30A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-010E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	**1.7**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	**1.1**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	**4.5**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	**4.4**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-010E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	**1.1**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	**12**		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	**140**		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	**3.4**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	**4.9**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	**4.2**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	**1.6**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	**3.3**		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	**3.1**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	**6.4**		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	**5.6**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	**5.1**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	**140**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	**8.9**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	**7.2**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	**83**		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	**110**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	**2.5**	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	**37**		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-010A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.1**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:49	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-031920**	Chain of Custody:	**184260**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-010A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**28000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-010A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**840000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-010B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**11000**		µg/L	20	2.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-011C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.16**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-011D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	**200**		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	**19**		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	**12**		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	**4.3**		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-011D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/27/20	PS20C27A	03/27/20	SF20C27A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-011E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 95575
Laboratory Sample Number: 95575-011

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-011E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
3. Aniline	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
8. Benzo(b)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
9. Benzo(ghi)perylene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
10. Benzo(k)fluoranthene	U	L+	µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
15. 4-Bromophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
22. 4-Chlorophenyl Phenylether	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
25. Dibenzofuran	U	L+	µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
27. Diethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
29. Dimethyl Phthalate	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
31. 2,4-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
32. 2,6-Dinitrotoluene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
41. 2-Methyl-4,6-dinitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
48. 4-Nitroaniline	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
50. 2-Nitrophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
51. 4-Nitrophenol	U	L+	µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
54. N-Nitrosodiphenylamine	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
57. Pentachlorophenol	U		µg/L	20	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
58. Phenanthrene	U	L+	µg/L	2.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
59. Phenol	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
63. 2,4,5-Trichlorophenol	U	L+	µg/L	5.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/24/20	PS20C24A	03/24/20	SN20C24B	GJP

pH, Electrometric **Aliquot ID: 95575-011A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:51	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-011A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**38000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-011A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1300000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-011B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-106-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**990**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-031820**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-012C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.32**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-012D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**7.3**		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	U		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	U		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	U		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	U		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-012D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-031820**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-012E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	**1.1**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-031820**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-012E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	**4.7**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-031820**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
3. Aniline	U	*	µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
28. 2,4-Dimethylphenol	**21**	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
35. Hexachlorobenzene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
36. Hexachlorobutadiene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-031820**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
43. 2-Methylphenol	**6.3**	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 44. 3&4-Methylphenol	**30**	G+	µg/L	10	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
51. 4-Nitrophenol	U	G+	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
59. Phenol	**36**	*	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

pH, Electrometric **Aliquot ID: 95575-012A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.9**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 15:54	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-031820**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/18/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-012A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**24000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-012A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**620000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-012B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-105-031820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3900**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-013C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.062**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-013D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	**510**		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	**17**		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	**4.5**		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	**7.2**		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-013D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-013E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 2. Acrylonitrile	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
3. Benzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
5. Bromochloromethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
7. Bromoform	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
8. Bromomethane	U	Y1	µg/L	10	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
9. 2-Butanone	U	Y1	µg/L	25	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
14. Carbon Tetrachloride	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
16. Chloroethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
17. Chloroform	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
18. Chloromethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
25. 1,4-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
27. 1,1-Dichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-013E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
37. 2-Hexanone	U	Y1	µg/L	50	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	15	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
42. MTBE	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
43. Naphthalene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
45. Styrene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
49. Toluene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	10	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
55. 1,2,3-Trichloropropane	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
59. Vinyl Chloride	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
60. m&p-Xylene	U	Y1	µg/L	5.0	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
61. o-Xylene	U	Y1	µg/L	2.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF
‡ 62. Xylenes	U	Y1	µg/L	7.5	5.0	03/26/20	VM20C26A	03/26/20	VM20C26A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
3. Aniline	U	*	µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
59. Phenol	U	*	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
60. Pyrene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

pH, Electrometric **Aliquot ID: 95575-013A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 16:01	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-013A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**39000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-013A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1800000**		µg/L	50000	1.3	03/25/20	WH20C25A	03/26/20	WH20C25A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-013B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110D-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3100**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-014C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-014D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	**310**		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	**48**		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	**5.6**		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	U		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-014D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-014E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-014E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
3. Aniline	U	*	µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
59. Phenol	U	*	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
60. Pyrene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

pH, Electrometric **Aliquot ID: 95575-014A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 16:03	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-014A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**46000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-014A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1300000**		µg/L	50000	1.3	03/26/20	WH20C26A	03/27/20	WH20C26A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-014B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110S-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3700**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 95575-015C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 95575-015D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	**330**		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	**26**		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	**78**		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	**72**		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID: 95575-015D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-015E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-015E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
3. Aniline	U	*	µg/L	4.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
45. Naphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
59. Phenol	U	*	µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
60. Pyrene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/26/20	SN20C26A	GJP

pH, Electrometric **Aliquot ID: 95575-015A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.3**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 16:04	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-015A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**28000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-015A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1200000**		µg/L	50000	1.3	03/26/20	WH20C26A	03/27/20	WH20C26A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-015B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-108-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**1500**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUPLICATE-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **95575-016C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.1**		mg/L	0.050	10	03/27/20	PW20C27A	03/27/20	WQ20C27A	CMB

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **95575-016D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
2. Barium	**400**		µg/L	100	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
3. Chromium	U		µg/L	10	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
4. Copper	U		µg/L	4.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
5. Lead	U		µg/L	3.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
6. Manganese	U		µg/L	50	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
7. Nickel	U		µg/L	20	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
8. Selenium	U		µg/L	5.0	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
9. Silver	U		µg/L	0.20	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA
10. Vanadium	U	LLV-	µg/L	4.0	10	03/26/20	PT20C26A	04/07/20	T420D07A	JLH
11. Zinc	U		µg/L	50	10	03/26/20	PT20C26A	03/26/20	T420C26A	CJA

Mercury by CVAAS, Total **Aliquot ID:** **95575-016D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	03/27/20	PM20C27A	03/27/20	M720C27A	JLH

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **95575-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
2. Aroclor-1221	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
3. Aroclor-1232	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
4. Aroclor-1242	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
5. Aroclor-1248	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
6. Aroclor-1254	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
7. Aroclor-1260	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUPLICATE-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 95575-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	03/26/20	PS20C26A	03/26/20	SF20C26A	RDK

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-016E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
3. Benzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
4. Bromobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
5. Bromochloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
6. Bromodichloromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
7. Bromoform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
8. Bromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
9. 2-Butanone	U		µg/L	25	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
10. n-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
11. sec-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
12. tert-Butylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
13. Carbon Disulfide	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
15. Chlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
16. Chloroethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
17. Chloroform	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
18. Chloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
21. Dibromochloromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
22. Dibromomethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
27. 1,1-Dichloroethane	**3.0**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUPLICATE-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 95575-016E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
35. Ethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
36. Ethylene Dibromide	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
37. 2-Hexanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
38. Isopropylbenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
40. Methylene Chloride	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 41. 2-Methylnaphthalene	**15**		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
42. MTBE	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
43. Naphthalene	**22**		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
44. n-Propylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
45. Styrene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
48. Tetrachloroethene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
49. Toluene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
53. Trichloroethene	**1.1**		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
59. Vinyl Chloride	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
60. m&p-Xylene	U		µg/L	2.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
61. o-Xylene	U		µg/L	1.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF
‡ 62. Xylenes	U		µg/L	3.0	1.0	03/24/20	VM20C24A	03/24/20	VM20C24A	JMF

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUPLICATE-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
3. Aniline	U	*	µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
4. Anthracene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
23. Chrysene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
28. 2,4-Dimethylphenol	**43**		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
30. 2,4-Dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
34. Fluorene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUPLICATE-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 95575-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
39. Indeno(1,2,3-cd)pyrene	U		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
40. Isophorone	U	L+	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
42. 2-Methylnaphthalene	**12**		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
45. Naphthalene	**18**		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
55. Di-n-octyl Phthalate	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
58. Phenanthrene	**3.9**		µg/L	2.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
59. Phenol	**7.2**	*	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
60. Pyrene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
61. Pyridine	U	L-	µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	03/25/20	PS20C25E	03/25/20	SN20C25A	GJP

pH, Electrometric **Aliquot ID: 95575-016A** **Matrix: Ground Water**
Method: EPA 9040C **Description: DUPLICATE-031920**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	H	pH Units	-1.00	1.0	NA	NA	03/24/20 16:05	WD20C24C	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUPLICATE-031920**	Chain of Custody:	**184259**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**03/19/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 95575-016A** **Matrix: Ground Water**
Method: EPA 9056A **Description: DUPLICATE-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**26000**		µg/L	10000	1.0	03/25/20	PW20C25C	03/25/20	WC20C25A	CMB

Residue, Filterable (TDS) **Aliquot ID: 95575-016A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: DUPLICATE-031920**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	50000	1.3	03/26/20	WH20C26A	03/27/20	WH20C26A	VO

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 95575-016B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: DUPLICATE-031920**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**2900**		µg/L	10	1.0	04/03/20	PW20D03A	04/03/20	WU20D03A	RKB

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

*****	:	Duplicate analysis not within control limits.
E1	:	The reported value is estimated due to the presence of interference.
G+	:	Recovery of the associated Surrogate Compound exceeds the upper control limit. Results may be biased high.
H	:	Hold time exceeded.
L-	:	Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+	:	Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
LLV-	:	Recovery in the associated low-level continuing calibration verification sample (LLCCV) exceeds the lower control limit. Results may be biased low.
V-	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.
Y1	:	Sample was diluted due to a sample matrix issue.

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Thursday, June 11, 2020

Fibertec Project Number:	96300
Project Identification:	1-10860 /1-10860
Submittal Date:	05/28/2020

Mr. Greg Oslosky
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Mr. Oslosky,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Please note that due to high results on samples -001 & -002 the LLHg test was changed to Total Mercury.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Rikki Lott at 4:07 PM, Jun 11, 2020

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAAS, Total **Aliquot ID: 96300-001** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100s-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**0.110**		µg/L	0.025	1.0	06/03/20	PM20F03D	06/03/20	M720F2B.	AVC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAAS, Total **Aliquot ID: 96300-002** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.424**		µg/L	0.025	1.0	06/03/20	PM20F03D	06/03/20	M720F2B.	AVC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:37**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-003** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-102-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**0.88**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-004** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-103-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**27**		ng/L	2.0	4.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-005** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-104-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**22**		ng/L	2.0	4.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-006** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-107s-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**47**		ng/L	5.0	10	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-007** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-107D-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	U		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 96300
Laboratory Sample Number: 96300-008

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:37**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-008** **Matrix: Ground Water**
Method: EPA 1631E **Description: TMW-26-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**20**		ng/L	2.0	4.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-009** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-105-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**5.6**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**09:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-010** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-106-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**0.82**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-011** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-108-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**0.78**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-012** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-109D-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**1.2**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-013** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.69**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-014** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-110D-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**1.8**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-015** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-101-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Mercury	**12**		ng/L	1.0	2.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**DUP-MW**	Chain of Custody:	**189212**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 96300-016** **Matrix: Ground Water**
Method: EPA 1631E **Description: DUP-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.75**		ng/L	0.50	1.0	06/03/20	PM20F03E	06/04/20	M520F04A	CJA

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Friday, June 19, 2020

Fibertec Project Number: 96319
Project Identification: 1-10860 /1-10860
Submittal Date: 05/28/2020

Mr. Greg Oslosky
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Mr. Oslosky,

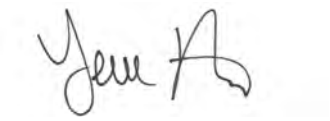
Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Please note that samples 1, 2, 4, 12, 13, 14, 16, for mentals analysis, arrived at the lab with a pH outside of the specified criteria of ≤2. The pH was adjusted at the lab. Results may be biased low.

Please note that sample 001 for Total Phosphorus analysis arrived at the lab with a pH outside of the specified criteria of ≤2. The pH as adjusted at the lab. Results may be biased low.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,



By Jesse Alton at 9:57 AM, Jun 19, 2020

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-001D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.59**		mg/L	0.050	10	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-001E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**15**		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**670**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	**35**		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	**9.0**		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U	LLV+	µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-001E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.098**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
2. Aroclor-1221	U	Y1	µg/L	1.5	10	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	**57**	Y1	µg/L	50	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	10	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
3. Benzene	**76**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
5. Bromochloromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
7. Bromoform	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
8. Bromomethane	U	Y1	µg/L	25	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
9. 2-Butanone	U	Y1	µg/L	25	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
13. Carbon Disulfide	**9.6**	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
16. Chloroethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
17. Chloroform	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
18. Chloromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
23. 1,2-Dichlorobenzene	**5.7**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-001F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**5.3**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
35. Ethylbenzene	**9.3**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
37. 2-Hexanone	U	Y1	µg/L	50	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	25	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
42. MTBE	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
43. Naphthalene	**240**	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
45. Styrene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
49. Toluene	**20**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 56. 1,2,3-Trimethylbenzene	**9.9**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
57. 1,2,4-Trimethylbenzene	**15**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
58. 1,3,5-Trimethylbenzene	**12**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
59. Vinyl Chloride	**7.6**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
60. m&p-Xylene	**55**	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
61. o-Xylene	**29**	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 62. Xylenes	**84**	Y1	µg/L	7.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	**6.0**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
3. Aniline	**7.3**	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 18. Carbazole	**7.8**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
25. Dibenzofuran	**4.2**	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
28. 2,4-Dimethylphenol	**39**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
33. Fluoranthene	**1.1**	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
42. 2-Methylnaphthalene	**7.3**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
43. 2-Methylphenol	**8.9**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 44. 3&4-Methylphenol	**150**	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
45. Naphthalene	**170**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
58. Phenanthrene	**5.8**	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
59. Phenol	**57**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

pH, Electrometric **Aliquot ID: 96319-001B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.6**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 21:05	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-001B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100s-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**290000**		µg/L	10000	10	06/06/20	PW20F05D	06/06/20	WC20F06A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-001A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100s-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**2900000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-001C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100s-052720**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**29000**		µg/L	50	5.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-002D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.45**		mg/L	0.050	10	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-002E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**400**		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**12**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	**27**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	**29**		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	**240**		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	**15**	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	**60**	LLV+	µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-002E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.139**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
2. Aroclor-1221	U	Y1	µg/L	0.75	5.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/08/20	SF20F08A	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-002F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	100	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	40	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
3. Benzene	**24**	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
4. Bromobenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
5. Bromochloromethane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
6. Bromodichloromethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
7. Bromoform	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
8. Bromomethane	U	Y1	µg/L	100	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
9. 2-Butanone	U	Y1	µg/L	100	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
10. n-Butylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
11. sec-Butylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
12. tert-Butylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
13. Carbon Disulfide	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
15. Chlorobenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
16. Chloroethane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
17. Chloroform	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
18. Chloromethane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
21. Dibromochloromethane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
22. Dibromomethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
23. 1,2-Dichlorobenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-002F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**20**	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
35. Ethylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
36. Ethylene Dibromide	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
37. 2-Hexanone	U	Y1	µg/L	100	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
38. Isopropylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
40. Methylene Chloride	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	100	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
42. MTBE	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
43. Naphthalene	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
44. n-Propylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
45. Styrene	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
48. Tetrachloroethene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
49. Toluene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
53. Trichloroethene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
59. Vinyl Chloride	**22**	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
60. m&p-Xylene	U	Y1	µg/L	20	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
61. o-Xylene	U	Y1	µg/L	10	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 62. Xylenes	U	Y1	µg/L	30	20	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
6. Benzo(a)anthracene	**1.0**	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
8. Benzo(b)fluoranthene	**1.3**	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
28. 2,4-Dimethylphenol	**7.2**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
33. Fluoranthene	**3.1**	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
43. 2-Methylphenol	**13**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 44. 3&4-Methylphenol	**31**	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
45. Naphthalene	**5.9**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
58. Phenanthrene	**4.4**	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
59. Phenol	**24**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

pH, Electrometric **Aliquot ID: 96319-002B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**10.7**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:53	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-002B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**140000**		µg/L	10000	5.0	06/06/20	PW20F05D	06/06/20	WC20F06A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-002A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**2600000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-002C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100i-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**23000**		µg/L	50	5.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:12**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-003D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0059**		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-003E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U	LLV+	µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-003E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:12**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-003F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:12**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-003F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
37. 2-Hexanone	U	V+	µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
40. Methylene Chloride	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:12**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:12**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

pH, Electrometric **Aliquot ID: 96319-003B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.25**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:36	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:12**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-003B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**17000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-003A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**300000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-003C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-102-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**58**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **96319-004D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.14**		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **96319-004E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**450**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	**5.9**		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U	LLV+	µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID:** **96319-004E** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **96319-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-004F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	10	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
3. Benzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
5. Bromochloromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
7. Bromoform	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
8. Bromomethane	U	Y1	µg/L	25	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
9. 2-Butanone	U	Y1	µg/L	25	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
16. Chloroethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
17. Chloroform	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
18. Chloromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-004F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
37. 2-Hexanone	U	Y1	µg/L	50	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
40. Methylene Chloride	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	25	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
42. MTBE	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
43. Naphthalene	**18**	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
45. Styrene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
49. Toluene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
59. Vinyl Chloride	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
60. m&p-Xylene	U	Y1	µg/L	5.0	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
61. o-Xylene	U	Y1	µg/L	2.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 62. Xylenes	U	Y1	µg/L	7.5	5.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 96319
Laboratory Sample Number: 96319-004

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
28. 2,4-Dimethylphenol	**26**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
42. 2-Methylnaphthalene	**15**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
45. Naphthalene	**19**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
58. Phenanthrene	**4.4**	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
59. Phenol	**5.7**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

pH, Electrometric **Aliquot ID: 96319-004B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-103-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:40	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:45**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-004B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-103-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**24000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-004A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-103-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1600000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-004C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-103-052720**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**2800**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-005D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**14**		mg/L	0.50	100	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-005E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**9.2**	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	**0.36**		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	**4.6**	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-005E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-005F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 2. Acrylonitrile	U		µg/L	20	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
3. Benzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
4. Bromobenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
5. Bromochloromethane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
6. Bromodichloromethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
7. Bromoform	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
8. Bromomethane	U		µg/L	50	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
9. 2-Butanone	U		µg/L	50	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
10. n-Butylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
11. sec-Butylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
12. tert-Butylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
13. Carbon Disulfide	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
14. Carbon Tetrachloride	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
15. Chlorobenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
16. Chloroethane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
17. Chloroform	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
18. Chloromethane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
21. Dibromochloromethane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
22. Dibromomethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
27. 1,1-Dichloroethane	**27**		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
28. 1,2-Dichloroethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
29. 1,1-Dichloroethene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-005F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
32. 1,2-Dichloropropane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
35. Ethylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
36. Ethylene Dibromide	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
37. 2-Hexanone	U	V+	µg/L	50	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
38. Isopropylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
40. Methylene Chloride	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	50	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
42. MTBE	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
43. Naphthalene	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
44. n-Propylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
45. Styrene	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
48. Tetrachloroethene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
49. Toluene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
53. Trichloroethene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
54. Trichlorofluoromethane	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
59. Vinyl Chloride	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
60. m&p-Xylene	U		µg/L	10	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
61. o-Xylene	U		µg/L	5.0	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 62. Xylenes	U		µg/L	15	10	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
2. Acenaphthylene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
3. Aniline	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
4. Anthracene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 5. Azobenzene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
6. Benzo(a)anthracene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
7. Benzo(a)pyrene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
8. Benzo(b)fluoranthene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
9. Benzo(ghi)perylene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
10. Benzo(k)fluoranthene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
11. Benzyl Alcohol	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
13. Bis(2-chloroethyl)ether	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
14. Bis(2-ethylhexyl)phthalate	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
16. Butyl Benzyl Phthalate	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 18. Carbazole	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
21. 2-Chlorophenol	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
23. Chrysene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
24. Dibenzo(a,h)anthracene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
25. Dibenzofuran	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
27. Diethyl Phthalate	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
28. 2,4-Dimethylphenol	**340**		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
30. 2,4-Dinitrophenol	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
33. Fluoranthene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
34. Fluorene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
36. Hexachlorobutadiene	U	V+	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
37. Hexachlorocyclopentadiene	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
39. Indeno(1,2,3-cd)pyrene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
40. Isophorone	U	Y1	µg/L	10	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
41. 2-Methyl-4,6-dinitrophenol	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
43. 2-Methylphenol	**8.0**		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 44. 3&4-Methylphenol	**95**		µg/L	10	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
45. Naphthalene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
46. 2-Nitroaniline	U		µg/L	20	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
47. 3-Nitroaniline	U		µg/L	20	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
48. 4-Nitroaniline	U		µg/L	20	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
49. Nitrobenzene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
50. 2-Nitrophenol	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
51. 4-Nitrophenol	U	V-	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
52. N-Nitrosodimethylamine	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
55. Di-n-octyl Phthalate	U	Y1	µg/L	10	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
57. Pentachlorophenol	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
58. Phenanthrene	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
59. Phenol	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
60. Pyrene	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
61. Pyridine	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
62. 1,2,4-Trichlorobenzene	U	Y1	µg/L	25	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
64. 2,4,6-Trichlorophenol	U	Y1	µg/L	5.0	5.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP

pH, Electrometric **Aliquot ID: 96319-005B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**10.9**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:55	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-005B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**220000**		µg/L	10000	10	06/06/20	PW20F05D	06/06/20	WC20F06A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-005A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**800000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-005C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-104-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**19000**		µg/L	50	5.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-006D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**4.9**		mg/L	0.25	50	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-006E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	**4.1**	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-006E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.049**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-006F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
3. Benzene	**1.4**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
15. Chlorobenzene	**1.4**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
23. 1,2-Dichlorobenzene	**7.6**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
25. 1,4-Dichlorobenzene	**1.3**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
27. 1,1-Dichloroethane	**3.1**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-006F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
35. Ethylbenzene	**1.1**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
37. 2-Hexanone	U	V+	µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
40. Methylene Chloride	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 41. 2-Methylnaphthalene	**11**	V+	µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
43. Naphthalene	**120**		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
49. Toluene	**3.2**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 56. 1,2,3-Trimethylbenzene	**5.4**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
57. 1,2,4-Trimethylbenzene	**4.3**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
58. 1,3,5-Trimethylbenzene	**1.5**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
60. m&p-Xylene	**3.2**		µg/L	2.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
61. o-Xylene	**2.9**		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 62. Xylenes	**6.0**		µg/L	3.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
28. 2,4-Dimethylphenol	**59**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
42. 2-Methylnaphthalene	**6.7**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
‡ 44. 3&4-Methylphenol	**30**	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
45. Naphthalene	**71**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
59. Phenol	**9.3**	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/03/20	SN20F03D	GJP

pH, Electrometric **Aliquot ID: 96319-006B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.1**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:47	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107s-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:06**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-006B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**21000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-006A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**810000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-006C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107s-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**8400**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-007D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**1.3**		mg/L	0.050	10	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-007E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-007E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-007F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
8. Bromomethane	U	L-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-007F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP

pH, Electrometric **Aliquot ID: 96319-007B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107D-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.06**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:51	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:05**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-007B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107D-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**24000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-007A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107D-052720**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**350000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-007C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107D-052720**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**480**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-008D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0066**		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-008E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**22**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	**11**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	**9.1**	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-008E** **Matrix: Ground Water**
Method: EPA 7470A **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.031**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-008F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-008F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
40. Methylene Chloride	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
35. Hexachlorobenzene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/02/20	PS20F02I	06/04/20	SN20F03F	GJP

pH, Electrometric **Aliquot ID: 96319-008B** **Matrix: Ground Water**
Method: EPA 9040C **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.0**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:46	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-052720**	Chain of Custody:	**187648**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/27/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-008B** **Matrix: Ground Water**
Method: EPA 9056A **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	U		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-008A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**560000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-008C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: TMW-26-052720**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**2100**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-009D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.097**		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-009E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	U		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	**30**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-009E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-009F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-009F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
40. Methylene Chloride	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/04/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-009B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.2**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 21:01	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-009B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	U		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-009A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**450000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-009C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-105-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**830**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:16**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-010D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-010E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**180**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**43**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	**5.1**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	**6.2**		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-010E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:16**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-010F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:16**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-010F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
40. Methylene Chloride	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/03/20	VB20F03A	06/03/20	VB20F03A	JLM

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 96319
Laboratory Sample Number: 96319-010

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:16**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:16**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-010B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-106-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.3**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:37	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:16**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-010B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-106-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**37000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-010A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-106-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1300000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-010C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-106-052820**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**1000**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-011D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-011E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**380**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**29**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	**13**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	**46**		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-011E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.113**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-011F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-011F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
42. MTBE	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
45. Styrene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
49. Toluene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-011B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-108-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.3**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 21:02	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-011B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-108-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**28000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-011A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-108-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1300000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-011C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-108-052820**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**1500**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-012D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.25**		mg/L	0.025	5.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-012E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**500**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	**160**		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-012E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.114**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-012F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	10	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
5. Bromochloromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
7. Bromoform	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
8. Bromomethane	U	L-	µg/L	25	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
9. 2-Butanone	U	Y1	µg/L	25	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
16. Chloroethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
17. Chloroform	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
18. Chloromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-012F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
37. 2-Hexanone	U	Y1	µg/L	50	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	25	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
42. MTBE	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
43. Naphthalene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
45. Styrene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
49. Toluene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
59. Vinyl Chloride	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
60. m&p-Xylene	**6.9**	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
61. o-Xylene	**2.9**	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 62. Xylenes	**9.8**	Y1	µg/L	7.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	**3.3**	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-012B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:31	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:35**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-012B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**32000**		µg/L	10000	1.0	06/05/20	PW20F05D	06/05/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-012A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1900000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-012C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-109D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3400**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-013D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-013E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**330**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**52**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-013E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.103**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-013F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
8. Bromomethane	U	L-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-013F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-013B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:57	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110s-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:20**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-013B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**51000**		µg/L	10000	1.0	06/06/20	PW20F05D	06/06/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-013A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-013C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110s-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3400**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-014D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-014E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**540**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**32**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	**9.4**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	**14**		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-014E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.105**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-014F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	Y1	µg/L	50	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 2. Acrylonitrile	U	Y1	µg/L	10	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
4. Bromobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
5. Bromochloromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
6. Bromodichloromethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
7. Bromoform	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
8. Bromomethane	U	L-	µg/L	25	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
9. 2-Butanone	U	Y1	µg/L	25	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
10. n-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
11. sec-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
12. tert-Butylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
13. Carbon Disulfide	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
14. Carbon Tetrachloride	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
15. Chlorobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
16. Chloroethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
17. Chloroform	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
18. Chloromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
19. 2-Chlorotoluene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
21. Dibromochloromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
22. Dibromomethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
23. 1,2-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
24. 1,3-Dichlorobenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
25. 1,4-Dichlorobenzene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
26. Dichlorodifluoromethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
27. 1,1-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
28. 1,2-Dichloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
29. 1,1-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-014F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
31. trans-1,2-Dichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
32. 1,2-Dichloropropane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
33. cis-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
34. trans-1,3-Dichloropropene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
35. Ethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
36. Ethylene Dibromide	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
37. 2-Hexanone	U	Y1	µg/L	50	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
38. Isopropylbenzene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
39. 4-Methyl-2-pentanone	U	Y1	µg/L	50	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U	Y1	µg/L	25	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
42. MTBE	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
43. Naphthalene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
44. n-Propylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
45. Styrene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
46. 1,1,1,2-Tetrachloroethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
47. 1,1,2,2-Tetrachloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
49. Toluene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
50. 1,2,4-Trichlorobenzene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
51. 1,1,1-Trichloroethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 52. 1,1,2-Trichloroethane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
53. Trichloroethene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
54. Trichlorofluoromethane	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
55. 1,2,3-Trichloropropane	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
57. 1,2,4-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
58. 1,3,5-Trimethylbenzene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
59. Vinyl Chloride	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
60. m&p-Xylene	U	Y1	µg/L	5.0	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
61. o-Xylene	U	Y1	µg/L	2.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 62. Xylenes	U	Y1	µg/L	7.5	5.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-014B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:33	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-014B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**39000**		µg/L	10000	1.0	06/06/20	PW20F05D	06/06/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-014A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1700000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-014C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110D-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**3100**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-015D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**2.6**		mg/L	0.25	50	06/04/20	PW20F04B	06/04/20	WQ20F04A	AMW

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-015E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**7.2**	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**130**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	U		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	U		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	U		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	**0.63**		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-015E** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.096**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-015F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
10. n-Butylbenzene	**3.3**	E1	µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
11. sec-Butylbenzene	**1.8**	E1	µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-015F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
35. Ethylbenzene	**5.2**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
42. MTBE	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
43. Naphthalene	**8.7**		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
44. n-Propylbenzene	**4.4**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
45. Styrene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
49. Toluene	**1.6**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 56. 1,2,3-Trimethylbenzene	**30**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
57. 1,2,4-Trimethylbenzene	**50**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
58. 1,3,5-Trimethylbenzene	**13**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
60. m&p-Xylene	**25**		µg/L	2.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
61. o-Xylene	**11**		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 62. Xylenes	**36**		µg/L	3.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-015B** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-101-052820**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.5**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:43	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-052820**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-015B** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-101-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**68000**		µg/L	10000	1.0	06/06/20	PW20F05D	06/06/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-015A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-101-052820**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**490000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-015C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-101-052820**

							Preparation		Analysis		
	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
‡	1. Ammonia-N	**3400**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-MW**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 96319-016D** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0091**		mg/L	0.0050	1.0	06/04/20	PW20F04B	06/04/20	WQ20F04A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 96319-016E** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U	LLV-	µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
2. Barium	**390**		µg/L	100	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
3. Chromium	**32**		µg/L	10	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
4. Copper	**12**		µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
5. Lead	**44**		µg/L	3.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
6. Manganese	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
7. Nickel	U		µg/L	20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
8. Selenium	U		µg/L	5.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
9. Silver	U		µg/L	0.20	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
10. Vanadium	U	LLV-	µg/L	4.0	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH
11. Zinc	U		µg/L	50	10	06/04/20	PT20F04A	06/04/20	T420F04B	JLH

Mercury by CVAAS, Total **Aliquot ID: 96319-016E** **Matrix: Ground Water**
Method: EPA 7470A **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.094**		µg/L	0.025	1.0	06/02/20	PM20F02B	06/02/20	M720F2B.	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
2. Aroclor-1221	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
3. Aroclor-1232	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
4. Aroclor-1242	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
5. Aroclor-1248	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
6. Aroclor-1254	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
7. Aroclor-1260	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-MW**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 96319-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	06/03/20	PS20F03E	06/04/20	SF20F04C	TKT

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-016F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-MW**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-016F** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
37. 2-Hexanone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
40. Methylene Chloride	U	V-	µg/L	5.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
42. MTBE	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
45. Styrene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/04/20	VB20F04A	06/04/20	VB20F04A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
49. Toluene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/03/20	VB20F03B	06/04/20	VB20F03B	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-MW**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
9. Benzo(ghi)perylene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
14. Bis(2-ethylhexyl)phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
15. 4-Bromophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
16. Butyl Benzyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
17. Di-n-butyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
22. 4-Chlorophenyl Phenylether	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
30. 2,4-Dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
35. Hexachlorobenzene	U	L+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
36. Hexachlorobutadiene	U	V+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
37. Hexachlorocyclopentadiene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-MW**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 96319-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
39. Indeno(1,2,3-cd)pyrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
51. 4-Nitrophenol	U	V-	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
55. Di-n-octyl Phthalate	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	V-	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
57. Pentachlorophenol	U	G+	µg/L	20	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
60. Pyrene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	06/04/20	PS20F04A	06/05/20	SN20F04D	GJP

pH, Electrometric **Aliquot ID: 96319-016B** **Matrix: Ground Water**
Method: EPA 9040C **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	06/03/20 20:59	WD20F03A	JMK

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-MW**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 96319-016B** **Matrix: Ground Water**
Method: EPA 9056A **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**28000**		µg/L	10000	1.0	06/06/20	PW20F05D	06/06/20	WC20F05A	CMB

Residue, Filterable (TDS) **Aliquot ID: 96319-016A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1400000**		µg/L	52000	1.3	06/03/20	WH20F03A	06/04/20	WH20F03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 96319-016C** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: Dup-MW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Ammonia-N	**1200**		µg/L	10	1.0	06/02/20	PW20F02A	06/02/20	WU20F02A	VO

Fibertec environmental services

Analytical Laboratory Report
Laboratory Project Number: 96319
Laboratory Sample Number: 96319-017

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Trip Blank**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Blank: Trip**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-017** **Matrix: Blank: Trip**
Method: EPA 5030C/EPA 8260D **Description: Trip Blank**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 2. Acrylonitrile	U		µg/L	2.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
3. Benzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
4. Bromobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
5. Bromochloromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
6. Bromodichloromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
7. Bromoform	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
8. Bromomethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
9. 2-Butanone	U		µg/L	25	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
10. n-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
11. sec-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
12. tert-Butylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
13. Carbon Disulfide	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
14. Carbon Tetrachloride	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
15. Chlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
16. Chloroethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
17. Chloroform	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
18. Chloromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
19. 2-Chlorotoluene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
21. Dibromochloromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
22. Dibromomethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
35. Ethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
36. Ethylene Dibromide	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
37. 2-Hexanone	U	V+	µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Trip Blank**	Chain of Custody:	**184649**
Client Project Name:	**1-10860**	Sample No:		Collect Date:	**05/28/20**
Client Project No:	**1-10860**	Sample Matrix:	**Blank: Trip**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 96319-017** **Matrix: Blank: Trip**
Method: EPA 5030C/EPA 8260D **Description: Trip Blank**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
40. Methylene Chloride	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 41. 2-Methylnaphthalene	U	V+	µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
42. MTBE	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
43. Naphthalene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
44. n-Propylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
45. Styrene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
48. Tetrachloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
49. Toluene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
53. Trichloroethene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
54. Trichlorofluoromethane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
59. Vinyl Chloride	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
60. m&p-Xylene	U		µg/L	2.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
61. o-Xylene	U		µg/L	1.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM
‡ 62. Xylenes	U		µg/L	3.0	1.0	06/02/20	VB20F02A	06/02/20	VB20F02A	JLM

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

E1 : The reported value is estimated due to the presence of interference.
G+ : Recovery of the associated Surrogate Compound exceeds the upper control limit. Results may be biased high.
H : Hold time exceeded.
L- : Recovery in the associated laboratory sample (LCS) exceeds the lower control limit. Results may be biased low.
L+ : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
LLV- : Recovery in the associated low-level continuing calibration verification sample (LLCCV) exceeds the lower control limit. Results may be biased low.
LLV+ : Recovery in the associated low-level continuing calibration verification sample (LLCCV) exceeds the upper control limit. Results may be biased high.
V- : Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.
Y1 : Sample was diluted due to a sample matrix issue.

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Wednesday, August 12, 2020

Fibertec Project Number:	97294
Project Identification:	RTTR (1-10860) /1-10860
Submittal Date:	07/31/2020

Mr. Greg Oslosky
Applied Science & Technology, Inc. - Brighton
10448 Citation
Suite 100
Brighton, MI 48116

Dear Mr. Oslosky,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

Due to the pH being ≥12, sample -001 could not be analyzed for Low Level Mercury.

Please note that samples -001, -002, -005, -008, -009, -011, -012, -013, -014 and -016 for metals analysis arrived at the lab with a pH that exceeded criteria of ≤2. The pH for the noted samples ranged from 3-13.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Rikki Lott at 9:46 AM, Aug 12, 2020

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-001C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.86**		mg/L	0.25	50	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-001D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**470**		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	U		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**22**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	**24**		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	**16**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-001D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.20**		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA
‡ 9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/06/20	SO20H06A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-001E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
3. Benzene	**20**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	**14**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-001E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
30. cis-1,2-Dichloroethene	**22**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	**75**		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	**11**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	**22**		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	**22**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	**7.1**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
33. Fluoranthene	**1.7**		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-001** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Hexachloroethane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
43. 2-Methylphenol	**15**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	**33**		µg/L	10	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
45. Naphthalene	**5.6**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
58. Phenanthrene	**4.0**		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
59. Phenol	**29**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

pH, Electrometric **Aliquot ID: 97294-001A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100i-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**9.80**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 13:31	WD20H04A	AMW
‡ 2. Temperature	**20**		°C	1.0	1.0	NA	NA	08/04/20 13:31	WD20H04A	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100i-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:15**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Inorganic Anions by IC **Aliquot ID: 97294-001A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100i-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**120000**		µg/L	10000	5.0	08/05/20	PW20H03C	08/05/20	WC20H04A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-001A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100i-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**2800000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-001B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100i-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Ammonia-N	**25000**		µg/L	50	5.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-002C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.46**		mg/L	0.10	20	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-002F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**45**		ng/L	4.9	9.9	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-002D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8.8**		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**320**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-002D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-100s-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/07/20	SO20H07B	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-002E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100s-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	**19**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-002E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	**61**		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-002E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	**30**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-002** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
33. Fluoranthene	**1.2**		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	**5.4**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	**46**		µg/L	10	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
45. Naphthalene	**59**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
58. Phenanthrene	**5.4**		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
59. Phenol	**23**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-100s-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:55**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-002A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 20:56	WD20H04D	JMK
‡ 2. Temperature	**22**		°C	1.0	1.0	NA	NA	08/04/20 20:56	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-002A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**86000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-002A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1700000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-002B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-100s-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**8100**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-073120**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:39**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-003C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**2.0**		mg/L	0.50	100	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-003F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**14**		ng/L	0.99	2.0	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-003D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5.3**		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**110**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-003D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-073120**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:39**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-101-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-003E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-073120**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:39**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-003E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	**28**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	**42**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	**13**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-073120**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:39**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-003E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	**24**		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	**12**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	**36**		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-073120**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:39**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-003** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
31. 2,4-Dinitrotoluene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
39. Indeno(1,2,3-cd)pyrene	U	V+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
45. Naphthalene	**7.1**		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
55. Di-n-octyl Phthalate	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
59. Phenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-101-073120**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:39**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-003A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.5**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 20:59	WD20H04D	JMK
‡ 2. Temperature	**22**		°C	1.0	1.0	NA	NA	08/04/20 20:59	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-003A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**58000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-003A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**440000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-003B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-101-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**3100**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-004C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.012**		mg/L	0.0050	1.0	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-004F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**8.0**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-004D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**110**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**4.5**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	**4.5**		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	**330**		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	**12**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-004D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-102D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-004E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡	2. Acrylonitrile	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	3. Benzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	4. Bromobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	5. Bromochloromethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	6. Bromodichloromethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	7. Bromoform	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	8. Bromomethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	9. 2-Butanone	U	V+	µg/L	25	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	10. n-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	11. sec-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	12. tert-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	13. Carbon Disulfide	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	14. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	15. Chlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	16. Chloroethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	17. Chloroform	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	18. Chloromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	19. 2-Chlorotoluene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	21. Dibromochloromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	22. Dibromomethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-004E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
35. Ethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
36. Ethylene Dibromide	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
37. 2-Hexanone	U	V+	µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
38. Isopropylbenzene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
40. Methylene Chloride	U	B	µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
42. MTBE	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
43. Naphthalene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
44. n-Propylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
45. Styrene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
48. Tetrachloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
49. Toluene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
53. Trichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
54. Trichlorofluoromethane	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
59. Vinyl Chloride	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-004E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
61. o-Xylene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 62. Xylenes	U		µg/L	3.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-004** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
59. Phenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-102D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-004A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.42**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 13:48	WD20H04A	AMW
‡ 2. Temperature	**20**		°C	1.0	1.0	NA	NA	08/04/20 13:48	WD20H04A	AMW

Inorganic Anions by IC **Aliquot ID: 97294-004A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**16000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-004A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**370000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-004B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-102D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**150**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-005C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**2.4**		mg/L	0.25	50	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID:** **97294-005F** **Matrix: Ground Water**
Method: EPA 1631E **Description:** **MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**40**		ng/L	5.0	9.9	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-005D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**380**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-005D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-103-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-005E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-005E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	**22**		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-005E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	**36**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-005** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
33. Fluoranthene	**1.1**		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	**12**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
45. Naphthalene	**22**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
58. Phenanthrene	**5.2**		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
59. Phenol	**6.3**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-103-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**12:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-005A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:01	WD20H04D	JMK
‡ 2. Temperature	**22**		°C	1.0	1.0	NA	NA	08/04/20 21:01	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-005A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**22000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-005A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1400000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-005B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-103-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**3600**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-006C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.012**		mg/L	0.0050	1.0	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-006F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**18**		ng/L	2.0	3.9	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-006D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**50**		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	U		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	**7.4**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	**120**		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-006D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-104-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-006E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-006E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	**17**		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-006E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	**430**	G+	µg/L	20	20	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-006** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
43. 2-Methylphenol	**8.8**	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	**78**	G+	µg/L	10	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U	G+	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-104-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**15:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-006A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.0**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:03	WD20H04D	JMK
‡ 2. Temperature	**22**		°C	1.0	1.0	NA	NA	08/04/20 21:03	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-006A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**240000**		µg/L	10000	10	08/05/20	PW20H03C	08/05/20	WC20H04A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-006A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**860000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-006B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-104-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**16000**		µg/L	20	2.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-007C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0057**		mg/L	0.0050	1.0	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-007F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**26**		ng/L	2.0	4.0	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-007D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**11**		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	U		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**4.6**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	**7.1**		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-007D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-105-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-007E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡	2. Acrylonitrile	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	3. Benzene	**1.1**		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	4. Bromobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	5. Bromochloromethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	6. Bromodichloromethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	7. Bromoform	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	8. Bromomethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	9. 2-Butanone	U	V+	µg/L	25	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	10. n-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	11. sec-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	12. tert-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	13. Carbon Disulfide	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	14. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	15. Chlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	16. Chloroethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	17. Chloroform	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	18. Chloromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	19. 2-Chlorotoluene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	21. Dibromochloromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	22. Dibromomethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-007E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
24. 1,3-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
35. Ethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
36. Ethylene Dibromide	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
37. 2-Hexanone	U	V+	µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
38. Isopropylbenzene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
40. Methylene Chloride	U	B	µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
42. MTBE	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
43. Naphthalene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
44. n-Propylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
45. Styrene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
48. Tetrachloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
49. Toluene	**5.8**		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
53. Trichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
54. Trichlorofluoromethane	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
59. Vinyl Chloride	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-007E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
61. o-Xylene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 62. Xylenes	U		µg/L	3.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	**20**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-007** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
43. 2-Methylphenol	**5.9**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	**28**		µg/L	10	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
59. Phenol	**17**		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/04/20	PS20H04D	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-105-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**13:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-007A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**11.9**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:04	WD20H04D	JMK
‡ 2. Temperature	**22**		°C	1.0	1.0	NA	NA	08/04/20 21:04	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-007A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**29000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-007A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**690000**		µg/L	50000	1.3	08/03/20	WH20G03A	08/04/20	WH20G03A	JMK

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-007B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-105-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**5500**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:58**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-008C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U		mg/L	0.0050	1.0	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-008F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**1.3**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-008D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**240**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	**14**		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**6.9**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-008D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:58**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-106-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-008E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:58**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-008E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:58**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-008E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:58**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-008** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
31. 2,4-Dinitrotoluene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
39. Indeno(1,2,3-cd)pyrene	U	V+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
55. Di-n-octyl Phthalate	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
59. Phenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-106-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:58**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-008A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:06	WD20H04D	JMK
‡ 2. Temperature	**22**		°C	1.0	1.0	NA	NA	08/04/20 21:06	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-008A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**47000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-008A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-008B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-106-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**2200**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-009C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**6.0**		mg/L	0.50	100	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID:** **97294-009F** **Matrix: Ground Water**
Method: EPA 1631E **Description:** **MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**38**		ng/L	4.9	9.9	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-009D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5.9**		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	U		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-009D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107S-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-009E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-009E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	**96**		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-009E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
28. 2,4-Dimethylphenol	**170**		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-009** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
31. 2,4-Dinitrotoluene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
39. Indeno(1,2,3-cd)pyrene	U	V+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
42. 2-Methylnaphthalene	**9.1**		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
43. 2-Methylphenol	**6.0**		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 44. 3&4-Methylphenol	**69**		µg/L	10	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
45. Naphthalene	**110**		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
55. Di-n-octyl Phthalate	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
59. Phenol	**19**		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107S-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**17:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-009A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.0**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:07	WD20H04D	JMK
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:07	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-009A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**24000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-009A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**730000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-009B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107S-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**11000**		µg/L	20	2.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-010C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.016**		mg/L	0.0050	1.0	08/05/20	PW20H05B	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-010F** **Matrix: Ground Water**
Method: EPA 1631E **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.97**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-010D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	U		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-010D** **Matrix: Ground Water**
Method: EPA 7470A **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-107D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-010E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡	2. Acrylonitrile	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	3. Benzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	4. Bromobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	5. Bromochloromethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	6. Bromodichloromethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	7. Bromoform	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	8. Bromomethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	9. 2-Butanone	U	V+	µg/L	25	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	10. n-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	11. sec-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	12. tert-Butylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	13. Carbon Disulfide	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	14. Carbon Tetrachloride	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	15. Chlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	16. Chloroethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	17. Chloroform	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	18. Chloromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	19. 2-Chlorotoluene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	21. Dibromochloromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
	22. Dibromomethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-010E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
24. 1,3-Dichlorobenzene	**1.3**		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
25. 1,4-Dichlorobenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
26. Dichlorodifluoromethane	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
27. 1,1-Dichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
28. 1,2-Dichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
29. 1,1-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
30. cis-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
31. trans-1,2-Dichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
32. 1,2-Dichloropropane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
33. cis-1,3-Dichloropropene	U		µg/L	0.50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
34. trans-1,3-Dichloropropene	U		µg/L	0.50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
35. Ethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
36. Ethylene Dibromide	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
37. 2-Hexanone	U	V+	µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
38. Isopropylbenzene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
39. 4-Methyl-2-pentanone	U		µg/L	50	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
40. Methylene Chloride	U	B	µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 41. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
42. MTBE	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
43. Naphthalene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
44. n-Propylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
45. Styrene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
46. 1,1,1,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
47. 1,1,2,2-Tetrachloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
48. Tetrachloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
49. Toluene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
50. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
51. 1,1,1-Trichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 52. 1,1,2-Trichloroethane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
53. Trichloroethene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
54. Trichlorofluoromethane	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
55. 1,2,3-Trichloropropane	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
57. 1,2,4-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
58. 1,3,5-Trimethylbenzene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
59. Vinyl Chloride	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-010E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	2.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
61. o-Xylene	U		µg/L	1.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS
‡ 62. Xylenes	U		µg/L	3.0	1.0	08/06/20	VM20H06A	08/06/20	VM20H06A	WCS

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-010** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
31. 2,4-Dinitrotoluene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
39. Indeno(1,2,3-cd)pyrene	U	V+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
55. Di-n-octyl Phthalate	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
59. Phenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
60. Pyrene	U	L+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/07/20	S620H07C	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-107D-073020**	Chain of Custody:	**184381**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**18:00**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-010A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**8.02**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 14:42	WD20H04A	AMW
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 14:42	WD20H04A	AMW

Inorganic Anions by IC **Aliquot ID: 97294-010A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**27000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-010A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**390000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-010B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-107D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**32**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-011C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0087**	*	mg/L	0.0050	1.0	08/05/20	PW20H05C	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID:** **97294-011F** **Matrix: Ground Water**
Method: EPA 1631E **Description:** **MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**3.2**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-011D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**340**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	**19**		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**27**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	**64**		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	**93**	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-011D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-108-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-011E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-011E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-011E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-011** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
58. Phenanthrene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
59. Phenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-108-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**08:25**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-011A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.3**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:09	WD20H04D	JMK
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:09	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-011A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**26000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-011A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1100000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-011B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-108-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**1800**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-012C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.15**	*	mg/L	0.025	5.0	08/05/20	PW20H05C	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID:** **97294-012F** **Matrix: Ground Water**
Method: EPA 1631E **Description:** **MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**2.1**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-012D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**510**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	U		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-012D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-109D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-012E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-012E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-012E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
2. Acenaphthylene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-012** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
33. Fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
34. Fluorene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
58. Phenanthrene	**2.7**		µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
59. Phenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-109D-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**16:50**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-012A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-109D-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. pH	**12.5**	E	pH Units	-1.00	1.0	NA	NA	08/04/20 21:14	WD20H04D	JMK
‡	2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:14	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-012A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**30000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-012A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**2000000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-012B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-109D-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**3700**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-013C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	**0.0063**	*	mg/L	0.0050	1.0	08/05/20	PW20H05C	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID:** **97294-013F** **Matrix: Ground Water**
Method: EPA 1631E **Description:** **MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**0.90**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-013D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**390**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	**52**		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**5.9**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-013D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110S-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-013E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-013E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-013E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
2. Acenaphthylene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
3. Aniline	U	G+	µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
4. Anthracene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 5. Azobenzene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
6. Benzo(a)anthracene	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 18. Carbazole	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
19. 4-Chloro-3-methylphenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
21. 2-Chlorophenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
23. Chrysene	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U	G+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
25. Dibenzofuran	U	G+	µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
26. 2,4-Dichlorophenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
28. 2,4-Dimethylphenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-013** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
30. 2,4-Dinitrophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
31. 2,4-Dinitrotoluene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
32. 2,6-Dinitrotoluene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
33. Fluoranthene	U	G+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
34. Fluorene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
35. Hexachlorobenzene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
36. Hexachlorobutadiene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V-	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
38. Hexachloroethane	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
40. Isophorone	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U	G+	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
42. 2-Methylnaphthalene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	U	G+	µg/L	10	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
45. Naphthalene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U	G+	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
47. 3-Nitroaniline	U	G+	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
48. 4-Nitroaniline	U	G+	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
49. Nitrobenzene	U	G+	µg/L	3.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U	G+	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
52. N-Nitrosodimethylamine	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U	V-	µg/L	20	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
58. Phenanthrene	U	G+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
59. Phenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
61. Pyridine	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U	G+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
64. 2,4,6-Trichlorophenol	U	G+	µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110S-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**10:10**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-013A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.4**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:15	WD20H04D	JMK
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:15	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-013A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**42000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-013A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1500000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-013B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110S-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**4000**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID:** **97294-014C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description:** **MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U	*	mg/L	0.0050	1.0	08/05/20	PW20H05C	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID:** **97294-014F** **Matrix: Ground Water**
Method: EPA 1631E **Description:** **MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**3.6**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID:** **97294-014D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description:** **MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**530**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	**34**		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**5.8**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	**10**		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID:** **97294-014D** **Matrix: Ground Water**
Method: EPA 7470A **Description:** **MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID:** **97294-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description:** **MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: MW-110D-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-014E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-073120**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-014E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-073120**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-014E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
2. Acenaphthylene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
3. Aniline	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
4. Anthracene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 5. Azobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
8. Benzo(b)fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
9. Benzo(ghi)perylene	U	L+	µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
10. Benzo(k)fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
11. Benzyl Alcohol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
13. Bis(2-chloroethyl)ether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 18. Carbazole	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
20. 2-Chloronaphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
21. 2-Chlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
25. Dibenzofuran	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
26. 2,4-Dichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
27. Diethyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
28. 2,4-Dimethylphenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-014** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: MW-110D-073120**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
30. 2,4-Dinitrophenol	U		µg/L	100	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
31. 2,4-Dinitrotoluene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
32. 2,6-Dinitrotoluene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
33. Fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
34. Fluorene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
35. Hexachlorobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
36. Hexachlorobutadiene	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
37. Hexachlorocyclopentadiene	U	V+	µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
38. Hexachloroethane	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
40. Isophorone	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
42. 2-Methylnaphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
43. 2-Methylphenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 44. 3&4-Methylphenol	U		µg/L	10	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
45. Naphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
46. 2-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
47. 3-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
48. 4-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
49. Nitrobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
50. 2-Nitrophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
51. 4-Nitrophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
52. N-Nitrosodimethylamine	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
54. N-Nitrosodiphenylamine	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
55. Di-n-octyl Phthalate	U	L+	µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
57. Pentachlorophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
58. Phenanthrene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
59. Phenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
60. Pyrene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
62. 1,2,4-Trichlorobenzene	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
64. 2,4,6-Trichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**MW-110D-073120**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/31/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**11:30**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-014A** **Matrix: Ground Water**
Method: EPA 9040C **Description: MW-110D-073120**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. pH	**12.5**	E	pH Units	-1.00	1.0	NA	NA	08/04/20 21:16	WD20H04D	JMK
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:16	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-014A** **Matrix: Ground Water**
Method: EPA 9056A **Description: MW-110D-073120**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	**37000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-014A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: MW-110D-073120**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**1800000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-014B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: MW-110D-073120**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Ammonia-N	**3500**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-015C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U	*	mg/L	0.0050	1.0	08/05/20	PW20H05C	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-015F** **Matrix: Ground Water**
Method: EPA 1631E **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**30**		ng/L	5.0	9.9	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-015D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	U		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	**14**		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**11**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	U		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	**14**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-015D** **Matrix: Ground Water**
Method: EPA 7470A **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: TMW-26-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-015E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-073020**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-015E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-015E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
2. Acenaphthylene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
3. Aniline	U		µg/L	4.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
4. Anthracene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 5. Azobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
8. Benzo(b)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
9. Benzo(ghi)perylene	U	L+	µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
10. Benzo(k)fluoranthene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
11. Benzyl Alcohol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
13. Bis(2-chloroethyl)ether	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 18. Carbazole	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
19. 4-Chloro-3-methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
20. 2-Chloronaphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
21. 2-Chlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
25. Dibenzofuran	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
26. 2,4-Dichlorophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
27. Diethyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
28. 2,4-Dimethylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-015** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: TMW-26-073020**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
30. 2,4-Dinitrophenol	U		µg/L	100	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
31. 2,4-Dinitrotoluene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
32. 2,6-Dinitrotoluene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
33. Fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
34. Fluorene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
35. Hexachlorobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
36. Hexachlorobutadiene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
37. Hexachlorocyclopentadiene	U	V+	µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
38. Hexachloroethane	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	2.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
40. Isophorone	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
42. 2-Methylnaphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
43. 2-Methylphenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
‡ 44. 3&4-Methylphenol	U		µg/L	10	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
45. Naphthalene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
46. 2-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
47. 3-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
48. 4-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
49. Nitrobenzene	U		µg/L	3.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
50. 2-Nitrophenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
51. 4-Nitrophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
52. N-Nitrosodimethylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
54. N-Nitrosodiphenylamine	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
55. Di-n-octyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
57. Pentachlorophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
58. Phenanthrene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
59. Phenol	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
60. Pyrene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
62. 1,2,4-Trichlorobenzene	U		µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
64. 2,4,6-Trichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**TMW-26-073020**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**14:40**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-015A** **Matrix: Ground Water**
Method: EPA 9040C **Description: TMW-26-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. pH	**12.0**	H	pH Units	-1.00	1.0	NA	NA	08/04/20 21:23	WD20H04D	JMK
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:23	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-015A** **Matrix: Ground Water**
Method: EPA 9056A **Description: TMW-26-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Chloride	U		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-015A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: TMW-26-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Total Dissolved Solids	**540000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-015B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: TMW-26-073020**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
1. Ammonia-N	**3300**		µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup3-GW**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Cyanide, Free (without distillation) **Aliquot ID: 97294-016C** **Matrix: Ground Water**
Method: ASTM D7237-10 **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Cyanide, Free	U	*	mg/L	0.0050	1.0	08/05/20	PW20H05C	08/05/20	WQ20H05A	VO

Mercury by CVAFS, Low-Level, Total **Aliquot ID: 97294-016F** **Matrix: Ground Water**
Method: EPA 1631E **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**3.7**		ng/L	0.50	0.99	08/07/20	PM20H07B	08/07/20	M520H07A	CJA

Trace Elements by ICP/MS, Total Recoverable **Aliquot ID: 97294-016D** **Matrix: Ground Water**
Method: EPA 3005A (Total Recoverable)/EPA 6020A **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
2. Barium	**520**		µg/L	100	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
3. Chromium	**33**		µg/L	10	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
4. Copper	**7.1**		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
5. Lead	**9.9**		µg/L	3.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
6. Manganese	U		µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
7. Nickel	U		µg/L	20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
8. Selenium	U		µg/L	5.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
9. Silver	U		µg/L	0.20	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
10. Vanadium	U		µg/L	4.0	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH
11. Zinc	U	LLV+	µg/L	50	10	08/06/20	PT20H06B	08/06/20	T420H06A	JLH

Mercury by CVAAS, Total **Aliquot ID: 97294-016D** **Matrix: Ground Water**
Method: EPA 7470A **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/L	0.20	1.0	08/04/20	PM20H04B	08/05/20	M720H05A	AVC

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup3-GW**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polychlorinated Biphenyls (PCBs) **Aliquot ID: 97294-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8082A **Description: Dup3-GW**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Aroclor-1016	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	2. Aroclor-1221	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	3. Aroclor-1232	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	4. Aroclor-1242	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	5. Aroclor-1248	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	6. Aroclor-1254	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
	7. Aroclor-1260	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	8. Aroclor-1262	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA
‡	9. Aroclor-1268	U		µg/L	0.20	1.0	08/05/20	PS20H05E	08/05/20	SO20H05A	BDA

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-016E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: Dup3-GW**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U	V+	µg/L	200	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	2. Acrylonitrile	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	3. Benzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	4. Bromobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	5. Bromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	6. Bromodichloromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	7. Bromoform	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	8. Bromomethane	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	9. 2-Butanone	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	10. n-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	11. sec-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	12. tert-Butylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	13. Carbon Disulfide	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	14. Carbon Tetrachloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	15. Chlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	16. Chloroethane	U		µg/L	40	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	17. Chloroform	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	18. Chloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	19. 2-Chlorotoluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	21. Dibromochloromethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
	22. Dibromomethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup3-GW**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-016E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
23. 1,2-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
24. 1,3-Dichlorobenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
25. 1,4-Dichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
26. Dichlorodifluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
27. 1,1-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
28. 1,2-Dichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
29. 1,1-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
30. cis-1,2-Dichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
31. trans-1,2-Dichloroethene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
32. 1,2-Dichloropropane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
33. cis-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
34. trans-1,3-Dichloropropene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
35. Ethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
36. Ethylene Dibromide	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
37. 2-Hexanone	U	V+	µg/L	50	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
38. Isopropylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
39. 4-Methyl-2-pentanone	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
40. Methylene Chloride	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 41. 2-Methylnaphthalene	U		µg/L	100	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
42. MTBE	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
43. Naphthalene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
44. n-Propylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
45. Styrene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
46. 1,1,1,2-Tetrachloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
47. 1,1,2,2-Tetrachloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
48. Tetrachloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
49. Toluene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
50. 1,2,4-Trichlorobenzene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
51. 1,1,1-Trichloroethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 52. 1,1,2-Trichloroethane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
53. Trichloroethene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
54. Trichlorofluoromethane	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
55. 1,2,3-Trichloropropane	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 56. 1,2,3-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
57. 1,2,4-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
58. 1,3,5-Trimethylbenzene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
59. Vinyl Chloride	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup3-GW**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS **Aliquot ID: 97294-016E** **Matrix: Ground Water**
Method: EPA 5030C/EPA 8260D **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
60. m&p-Xylene	U		µg/L	20	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
61. o-Xylene	U		µg/L	10	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM
‡ 62. Xylenes	U		µg/L	30	20	08/05/20	VB20H05A	08/05/20	VB20H05A	KCM

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
2. Acenaphthylene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
3. Aniline	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
4. Anthracene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 5. Azobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
6. Benzo(a)anthracene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
7. Benzo(a)pyrene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
8. Benzo(b)fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
9. Benzo(ghi)perylene	U	L+	µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
10. Benzo(k)fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
11. Benzyl Alcohol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
12. Bis(2-chloroethoxy)methane	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
13. Bis(2-chloroethyl)ether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
14. Bis(2-ethylhexyl)phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
15. 4-Bromophenyl Phenylether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
16. Butyl Benzyl Phthalate	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
17. Di-n-butyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 18. Carbazole	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
19. 4-Chloro-3-methylphenol	**12**		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
20. 2-Chloronaphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
21. 2-Chlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
22. 4-Chlorophenyl Phenylether	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
23. Chrysene	U		µg/L	1.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
24. Dibenzo(a,h)anthracene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
25. Dibenzofuran	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
26. 2,4-Dichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
27. Diethyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
28. 2,4-Dimethylphenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup3-GW**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Base/Neutral/Acid Semivolatiles by GC/MS **Aliquot ID: 97294-016** **Matrix: Ground Water**
Method: EPA 3510C/EPA 8270E **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
29. Dimethyl Phthalate	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
30. 2,4-Dinitrophenol	U		µg/L	100	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
31. 2,4-Dinitrotoluene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
32. 2,6-Dinitrotoluene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
33. Fluoranthene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
34. Fluorene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
35. Hexachlorobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
36. Hexachlorobutadiene	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
37. Hexachlorocyclopentadiene	U	V+	µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
38. Hexachloroethane	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
39. Indeno(1,2,3-cd)pyrene	U	L+	µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
40. Isophorone	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
41. 2-Methyl-4,6-dinitrophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
42. 2-Methylnaphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
43. 2-Methylphenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
‡ 44. 3&4-Methylphenol	U		µg/L	10	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
45. Naphthalene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
46. 2-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
47. 3-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
48. 4-Nitroaniline	U		µg/L	20	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
49. Nitrobenzene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
50. 2-Nitrophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
51. 4-Nitrophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
52. N-Nitrosodimethylamine	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
53. N-Nitrosodi-n-propylamine	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
54. N-Nitrosodiphenylamine	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
55. Di-n-octyl Phthalate	U	L+	µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
56. 2,2'-Oxybis(1-chloropropane)	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
57. Pentachlorophenol	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
58. Phenanthrene	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
59. Phenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
60. Pyrene	U	V+	µg/L	5.0	1.0	08/06/20	PS20H06G	08/08/20	S620H07D	GJP
61. Pyridine	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
62. 1,2,4-Trichlorobenzene	U		µg/L	25	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
63. 2,4,5-Trichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS
64. 2,4,6-Trichlorophenol	U		µg/L	5.0	5.0	08/06/20	PS20H06G	08/11/20	SN20H10C	ALS

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup3-GW**	Chain of Custody:	**184382**
Client Project Name:	**RTTR (1-10860)**	Sample No:		Collect Date:	**07/30/20**
Client Project No:	**1-10860**	Sample Matrix:	**Ground Water**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

pH, Electrometric **Aliquot ID: 97294-016A** **Matrix: Ground Water**
Method: EPA 9040C **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. pH	**12.5**	E	pH Units	-1.00	1.0	NA	NA	08/04/20 21:24	WD20H04D	JMK
‡ 2. Temperature	**21**		°C	1.0	1.0	NA	NA	08/04/20 21:25	WD20H04D	JMK

Inorganic Anions by IC **Aliquot ID: 97294-016A** **Matrix: Ground Water**
Method: EPA 9056A **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Chloride	**37000**		µg/L	10000	1.0	08/04/20	PW20H03C	08/04/20	WC20H03A	VO

Residue, Filterable (TDS) **Aliquot ID: 97294-016A** **Matrix: Ground Water**
Method: SM 2540 C-2011 **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Total Dissolved Solids	**1900000**		µg/L	50000	1.3	08/05/20	WH20H05C	08/07/20	WH20H05C	CMB

Nitrogen, Ammonia (Auto Analyzer) **Aliquot ID: 97294-016B** **Matrix: Ground Water**
Method: SM 4500-NH3 G-2011 **Description: Dup3-GW**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Ammonia-N	**3500**	F-	µg/L	10	1.0	08/07/20	PW20H07A	08/07/20	WU20H07B	AMW

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

*****	:	Duplicate analysis not within control limits.
B	:	Analyte is found in the associated method blank as well as in the sample.
E	:	This flag identifies compounds whose response exceed the response of the highest standard in the initial calibration range of the instrument for that specific analysis.
F-	:	Recovery from the spiked aliquot exceeds the lower control limit (matrix spike or matrix spike duplicate).
G+	:	Recovery of the associated Surrogate Compound exceeds the upper control limit. Results may be biased high.
H	:	Hold time exceeded.
L+	:	Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
LLV+	:	Recovery in the associated low-level continuing calibration verification sample (LLCCV) exceeds the upper control limit. Results may be biased high.
V-	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the lower control limit. Results may be biased low.
V+	:	Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.

Accreditation Number(s):

T104704518-19-8 (TX)

Attachment D

ProUCL Output Files

UCL Statistics for Data Sets with Non-Detects

Northern Flow Zone

User Selected Options		RTRR - Riverview	
Date/Time of Computation	ProUCL 5.13/31/2021 2:01:33 PM	ASTI Project Number: 10860	
From File	WorkSheet.xls		
Full Precision	OFF		
Confidence Coefficient	95%		
Number of Bootstrap Operations	2000		

Arsenic

General Statistics

Total Number of Observations	8	Number of Distinct Observations	8
		Number of Missing Observations	0
Minimum	8.8	Mean	161.6
Maximum	470	Median	75.5
SD	181.4	Std. Error of Mean	64.15
Coefficient of Variation	1.123	Skewness	1.046

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest. For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012). Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

Normal GOF Test

Shapiro Wilk Test Statistic	0.816	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.258	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level	

Data appear Approximate Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	283.1	95% Adjusted-CLT UCL (Chen-1995)	292.5
		95% Modified-t UCL (Johnson-1978)	287.1

Gamma GOF Test

A-D Test Statistic	0.286	**Anderson-Darling Gamma GOF Test**	
5% A-D Critical Value	0.744	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.174	**Kolmogorov-Smirnov Gamma GOF Test**	
5% K-S Critical Value	0.304	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.777	k star (bias corrected MLE)	0.569
Theta hat (MLE)	207.9	Theta star (bias corrected MLE)	284
nu hat (MLE)	12.44	nu star (bias corrected)	9.106
MLE Mean (bias corrected)	161.6	MLE Sd (bias corrected)	214.2
		Approximate Chi Square Value (0.05)	3.391
Adjusted Level of Significance	0.0195	Adjusted Chi Square Value	2.57

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	434	95% Adjusted Gamma UCL (use when n<50)	572.5

55												
56	**Lognormal GOF Test**											
57					Shapiro Wilk Test Statistic	0.947	**Shapiro Wilk Lognormal GOF Test**					
58					5% Shapiro Wilk Critical Value	0.818	Data appear Lognormal at 5% Significance Level					
59					Lilliefors Test Statistic	0.133	**Lilliefors Lognormal GOF Test**					
60					5% Lilliefors Critical Value	0.283	Data appear Lognormal at 5% Significance Level					
61	**Data appear Lognormal at 5% Significance Level**											
62												
63	**Lognormal Statistics**											
64					Minimum of Logged Data	2.175	Mean of logged Data	4.319				
65					Maximum of Logged Data	6.153	SD of logged Data	1.469				
66												
67	**Assuming Lognormal Distribution**											
68					95% H-UCL	2930	90% Chebyshev (MVUE) UCL	457.5				
69					95% Chebyshev (MVUE) UCL	584.1	97.5% Chebyshev (MVUE) UCL	759.8				
70					99% Chebyshev (MVUE) UCL	1105						
71												
72	**Nonparametric Distribution Free UCL Statistics**											
73	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
74												
75	**Nonparametric Distribution Free UCLs**											
76					95% CLT UCL	267.1	95% Jackknife UCL	283.1				
77					95% Standard Bootstrap UCL	259.6	95% Bootstrap-t UCL	412.8				
78					95% Hall's Bootstrap UCL	323.5	95% Percentile Bootstrap UCL	271.6				
79					95% BCA Bootstrap UCL	284.9						
80					90% Chebyshev(Mean, Sd) UCL	354	95% Chebyshev(Mean, Sd) UCL	441.2				
81					97.5% Chebyshev(Mean, Sd) UCL	562.2	99% Chebyshev(Mean, Sd) UCL	799.9				
82												
83	**Suggested UCL to Use**											
84					95% Student's-t UCL	283.1						
85												
86	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
87	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
88												
89	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
90	Recommendations are based upon data size, data distribution, and skewness.											
91	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
92	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
93												
94	**Total Chromium**											
95												
96	**General Statistics**											
97					Total Number of Observations	8	Number of Distinct Observations	2				
98					Number of Detects	1	Number of Non-Detects	7				
99					Number of Distinct Detects	1	Number of Distinct Non-Detects	1				
100												
101	**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**											
102	**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**											
103												
104	**The data set for variable Total Chromium was not processed!**											
105												
106												
107	**Mercury**											
108												

109	**General Statistics**											
110					Total Number of Observations	8			Number of Distinct Observations	4		
111					Number of Detects	4			Number of Non-Detects	4		
112					Number of Distinct Detects	4			Number of Distinct Non-Detects	1		
113					Minimum Detect	0.045			Minimum Non-Detect	0.2		
114					Maximum Detect	0.424			Maximum Non-Detect	0.2		
115					Variance Detects	0.0274			Percent Non-Detects	50%		
116					Mean Detects	0.195			SD Detects	0.166		
117					Median Detects	0.155			CV Detects	0.85		
118					Skewness Detects	1.188			Kurtosis Detects	1.229		
119					Mean of Logged Detects	-1.944			SD of Logged Detects	0.949		
120												
121	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
122	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											
123	**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**											
124	**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**											
125												
126	**Normal GOF Test on Detects Only**											
127					Shapiro Wilk Test Statistic	0.924			**Shapiro Wilk GOF Test**			
128					5% Shapiro Wilk Critical Value	0.748			Detected Data appear Normal at 5% Significance Level			
129					Lilliefors Test Statistic	0.237			**Lilliefors GOF Test**			
130					5% Lilliefors Critical Value	0.375			Detected Data appear Normal at 5% Significance Level			
131	**Detected Data appear Normal at 5% Significance Level**											
132												
133	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
134					KM Mean	0.136			KM Standard Error of Mean	0.0514		
135					KM SD	0.119			95% KM (BCA) UCL	N/A		
136					95% KM (t) UCL	0.233			95% KM (Percentile Bootstrap) UCL	N/A		
137					95% KM (z) UCL	0.221			95% KM Bootstrap t UCL	N/A		
138					90% KM Chebyshev UCL	0.29			95% KM Chebyshev UCL	0.36		
139					97.5% KM Chebyshev UCL	0.457			99% KM Chebyshev UCL	0.647		
140												
141	**Gamma GOF Tests on Detected Observations Only**											
142					A-D Test Statistic	0.197			**Anderson-Darling GOF Test**			
143					5% A-D Critical Value	0.661			Detected data appear Gamma Distributed at 5% Significance Level			
144					K-S Test Statistic	0.173			**Kolmogorov-Smirnov GOF**			
145					5% K-S Critical Value	0.399			Detected data appear Gamma Distributed at 5% Significance Level			
146	**Detected data appear Gamma Distributed at 5% Significance Level**											
147												
148	**Gamma Statistics on Detected Data Only**											
149					k hat (MLE)	1.772			k star (bias corrected MLE)	0.61		
150					Theta hat (MLE)	0.11			Theta star (bias corrected MLE)	0.319		
151					nu hat (MLE)	14.18			nu star (bias corrected)	4.878		
152					Mean (detects)	0.195						
153												
154	**Gamma ROS Statistics using Imputed Non-Detects**											
155	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
156	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
157	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
158	This is especially true when the sample size is small.											
159	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
160					Minimum	0.01			Mean	0.133		
161					Maximum	0.424			Median	0.0988		
162					SD	0.132			CV	0.999		

163					k hat (MLE)	1.202				k star (bias corrected MLE)		0.835
164					Theta hat (MLE)	0.11				Theta star (bias corrected MLE)		0.159
165					nu hat (MLE)	19.23				nu star (bias corrected)		13.35
166					Adjusted Level of Significance (β)	0.0195						
167					Approximate Chi Square Value (13.35, α)	6.131				Adjusted Chi Square Value (13.35, β)		4.949
168					95% Gamma Approximate UCL (use when n>=50)	0.289				95% Gamma Adjusted UCL (use when n<50)		N/A
169												
170					**Estimates of Gamma Parameters using KM Estimates**							
171					Mean (KM)	0.136				SD (KM)		0.119
172					Variance (KM)	0.0142				SE of Mean (KM)		0.0514
173					k hat (KM)	1.301				k star (KM)		0.897
174					nu hat (KM)	20.82				nu star (KM)		14.35
175					theta hat (KM)	0.105				theta star (KM)		0.152
176					80% gamma percentile (KM)	0.221				90% gamma percentile (KM)		0.322
177					95% gamma percentile (KM)	0.424				99% gamma percentile (KM)		0.663
178												
179					**Gamma Kaplan-Meier (KM) Statistics**							
180					Approximate Chi Square Value (14.35, α)	6.81				Adjusted Chi Square Value (14.35, β)		5.551
181					95% Gamma Approximate KM-UCL (use when n>=50)	0.287				95% Gamma Adjusted KM-UCL (use when n<50)		0.352
182												
183					**Lognormal GOF Test on Detected Observations Only**							
184					Shapiro Wilk Test Statistic	0.998				**Shapiro Wilk GOF Test**		
185					5% Shapiro Wilk Critical Value	0.748				Detected Data appear Lognormal at 5% Significance Level		
186					Lilliefors Test Statistic	0.141				**Lilliefors GOF Test**		
187					5% Lilliefors Critical Value	0.375				Detected Data appear Lognormal at 5% Significance Level		
188					**Detected Data appear Lognormal at 5% Significance Level**							
189												
190					**Lognormal ROS Statistics Using Imputed Non-Detects**							
191					Mean in Original Scale	0.134				Mean in Log Scale		-2.333
192					SD in Original Scale	0.129				SD in Log Scale		0.831
193					95% t UCL (assumes normality of ROS data)	0.22				95% Percentile Bootstrap UCL		0.209
194					95% BCA Bootstrap UCL	0.229				95% Bootstrap t UCL		0.352
195					95% H-UCL (Log ROS)	0.354						
196												
197					**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**							
198					KM Mean (logged)	-2.299				KM Geo Mean		0.1
199					KM SD (logged)	0.751				95% Critical H Value (KM-Log)		2.843
200					KM Standard Error of Mean (logged)	0.379				95% H-UCL (KM -Log)		0.298
201					KM SD (logged)	0.751				95% Critical H Value (KM-Log)		2.843
202					KM Standard Error of Mean (logged)	0.379						
203												
204					**DL/2 Statistics**							
205					**DL/2 Normal**					**DL/2 Log-Transformed**		
206					Mean in Original Scale	0.147				Mean in Log Scale		-2.123
207					SD in Original Scale	0.12				SD in Log Scale		0.65
208					95% t UCL (Assumes normality)	0.227				95% H-Stat UCL		0.282
209					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
210												
211					**Nonparametric Distribution Free UCL Statistics**							
212					**Detected Data appear Normal Distributed at 5% Significance Level**							
213												
214					**Suggested UCL to Use**							
215					95% KM (t) UCL	0.233						
216												

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Aniline

General Statistics

Total Number of Observations	8	Number of Distinct Observations	2
Number of Detects	1	Number of Non-Detects	7
Number of Distinct Detects	1	Number of Distinct Non-Detects	1

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Aniline was not processed!

Carbazole

General Statistics

Total Number of Observations	8	Number of Distinct Observations	4
Number of Detects	3	Number of Non-Detects	5
Number of Distinct Detects	3	Number of Distinct Non-Detects	1
Minimum Detect	7.1	Minimum Non-Detect	5
Maximum Detect	12	Maximum Non-Detect	5
Variance Detects	7.023	Percent Non-Detects	62.5%
Mean Detects	8.967	SD Detects	2.65
Median Detects	7.8	CV Detects	0.296
Skewness Detects	1.597	Kurtosis Detects	N/A
Mean of Logged Detects	2.166	SD of Logged Detects	0.28

Warning: Data set has only 3 Detected Values.
This is not enough to compute meaningful or reliable statistics and estimates.

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use
guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.
For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).
Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.855	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.337	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	6.488	KM Standard Error of Mean	1.01
KM SD	2.333	95% KM (BCA) UCL	N/A
95% KM (t) UCL	8.402	95% KM (Percentile Bootstrap) UCL	N/A
95% KM (z) UCL	8.149	95% KM Bootstrap t UCL	N/A
90% KM Chebyshev UCL	9.518	95% KM Chebyshev UCL	10.89

271				97.5% KM Chebyshev UCL		12.8				99% KM Chebyshev UCL		16.54
272												
273						**Gamma GOF Tests on Detected Observations Only**							
274						**Not Enough Data to Perform GOF Test**							
275												
276						**Gamma Statistics on Detected Data Only**							
277				k hat (MLE)		18.59				k star (bias corrected MLE)		N/A
278				Theta hat (MLE)		0.482				Theta star (bias corrected MLE)		N/A
279				nu hat (MLE)		111.5				nu star (bias corrected)		N/A
280				Mean (detects)		8.967						
281												
282						**Gamma ROS Statistics using Imputed Non-Detects**							
283						GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs							
284						GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)							
285						For such situations, GROS method may yield incorrect values of UCLs and BTVs							
286						This is especially true when the sample size is small.							
287						For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates							
288				Minimum		0.01				Mean		4.024
289				Maximum		12				Median		2.538
290				SD		4.469				CV		1.11
291				k hat (MLE)		0.387				k star (bias corrected MLE)		0.325
292				Theta hat (MLE)		10.41				Theta star (bias corrected MLE)		12.38
293				nu hat (MLE)		6.186				nu star (bias corrected)		5.199
294				Adjusted Level of Significance (β)		0.0195						
295				Approximate Chi Square Value (5.20, α)		1.245				Adjusted Chi Square Value (5.20, β)		0.825
296				95% Gamma Approximate UCL (use when n>=50)		16.8				95% Gamma Adjusted UCL (use when n<50)		N/A
297												
298						**Estimates of Gamma Parameters using KM Estimates**							
299				Mean (KM)		6.488				SD (KM)		2.333
300				Variance (KM)		5.444				SE of Mean (KM)		1.01
301				k hat (KM)		7.732				k star (KM)		4.916
302				nu hat (KM)		123.7				nu star (KM)		78.65
303				theta hat (KM)		0.839				theta star (KM)		1.32
304				80% gamma percentile (KM)		8.737				90% gamma percentile (KM)		10.41
305				95% gamma percentile (KM)		11.93				99% gamma percentile (KM)		15.15
306												
307						**Gamma Kaplan-Meier (KM) Statistics**							
308				Approximate Chi Square Value (78.65, α)		59.22				Adjusted Chi Square Value (78.65, β)		54.97
309				95% Gamma Approximate KM-UCL (use when n>=50)		8.616				95% Gamma Adjusted KM-UCL (use when n<50)		9.282
310												
311						**Lognormal GOF Test on Detected Observations Only**							
312				Shapiro Wilk Test Statistic		0.879				**Shapiro Wilk GOF Test**		
313				5% Shapiro Wilk Critical Value		0.767				Detected Data appear Lognormal at 5% Significance Level		
314				Lilliefors Test Statistic		0.323				**Lilliefors GOF Test**		
315				5% Lilliefors Critical Value		0.425				Detected Data appear Lognormal at 5% Significance Level		
316						**Detected Data appear Lognormal at 5% Significance Level**							
317												
318						**Lognormal ROS Statistics Using Imputed Non-Detects**							
319				Mean in Original Scale		5.331				Mean in Log Scale		1.496
320				SD in Original Scale		3.431				SD in Log Scale		0.641
321				95% t UCL (assumes normality of ROS data)		7.63				95% Percentile Bootstrap UCL		7.297
322				95% BCA Bootstrap UCL		7.736				95% Bootstrap t UCL		8.69
323				95% H-UCL (Log ROS)		10.32						
324												

325	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
326					KM Mean (logged)	1.818				KM Geo Mean	6.161	
327					KM SD (logged)	0.304				95% Critical H Value (KM-Log)	2.063	
328					KM Standard Error of Mean (logged)	0.132				95% H-UCL (KM -Log)	8.176	
329					KM SD (logged)	0.304				95% Critical H Value (KM-Log)	2.063	
330					KM Standard Error of Mean (logged)	0.132						
331												
332	**DL/2 Statistics**											
333				**DL/2 Normal**					**DL/2 Log-Transformed**			
334					Mean in Original Scale	4.925				Mean in Log Scale	1.385	
335					SD in Original Scale	3.634				SD in Log Scale	0.664	
336					95% t UCL (Assumes normality)	7.359				95% H-Stat UCL	9.711	
337	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
338												
339	**Nonparametric Distribution Free UCL Statistics**											
340	**Detected Data appear Normal Distributed at 5% Significance Level**											
341												
342	**Suggested UCL to Use**											
343					95% KM (t) UCL	8.402						
344												
345	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
346	Recommendations are based upon data size, data distribution, and skewness.											
347	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
348	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
349												
350	**Dibenzofuran**											
351												
352	**General Statistics**											
353					Total Number of Observations	8				Number of Distinct Observations	2	
354					Number of Detects	1				Number of Non-Detects	7	
355					Number of Distinct Detects	1				Number of Distinct Non-Detects	1	
356												
357	**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**											
358	**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**											
359												
360	**The data set for variable Dibenzofuran was not processed!**											
361												
362												
363	**Fluoranthene**											
364												
365	**General Statistics**											
366					Total Number of Observations	8				Number of Distinct Observations	7	
367					Number of Detects	7				Number of Non-Detects	1	
368					Number of Distinct Detects	6				Number of Distinct Non-Detects	1	
369					Minimum Detect	1.1				Minimum Non-Detect	1	
370					Maximum Detect	3.1				Maximum Non-Detect	1	
371					Variance Detects	0.496				Percent Non-Detects	12.5%	
372					Mean Detects	1.671				SD Detects	0.704	
373					Median Detects	1.6				CV Detects	0.421	
374					Skewness Detects	1.637				Kurtosis Detects	3.014	
375					Mean of Logged Detects	0.45				SD of Logged Detects	0.372	
376												
377	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
378	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											

379	For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).											
380	Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1											
381												
382	Normal GOF Test on Detects Only											
383					Shapiro Wilk Test Statistic	0.817	Shapiro Wilk GOF Test					
384					5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level					
385					Lilliefors Test Statistic	0.23	Lilliefors GOF Test					
386					5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level					
387	Detected Data appear Normal at 5% Significance Level											
388												
389	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs											
390					KM Mean	1.588	KM Standard Error of Mean	0.248				
391					KM SD	0.649	95% KM (BCA) UCL	1.988				
392					95% KM (t) UCL	2.057	95% KM (Percentile Bootstrap) UCL	1.988				
393					95% KM (z) UCL	1.995	95% KM Bootstrap t UCL	2.308				
394					90% KM Chebyshev UCL	2.331	95% KM Chebyshev UCL	2.668				
395					97.5% KM Chebyshev UCL	3.135	99% KM Chebyshev UCL	4.053				
396												
397	Gamma GOF Tests on Detected Observations Only											
398					A-D Test Statistic	0.443	Anderson-Darling GOF Test					
399					5% A-D Critical Value	0.709	Detected data appear Gamma Distributed at 5% Significance Level					
400					K-S Test Statistic	0.206	Kolmogorov-Smirnov GOF					
401					5% K-S Critical Value	0.312	Detected data appear Gamma Distributed at 5% Significance Level					
402	Detected data appear Gamma Distributed at 5% Significance Level											
403												
404	Gamma Statistics on Detected Data Only											
405					k hat (MLE)	7.959	k star (bias corrected MLE)	4.644				
406					Theta hat (MLE)	0.21	Theta star (bias corrected MLE)	0.36				
407					nu hat (MLE)	111.4	nu star (bias corrected)	65.01				
408					Mean (detects)	1.671						
409												
410	Gamma ROS Statistics using Imputed Non-Detects											
411	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
412	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
413	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
414	This is especially true when the sample size is small.											
415	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
416					Minimum	0.291	Mean	1.499				
417					Maximum	3.1	Median	1.4				
418					SD	0.814	CV	0.543				
419					k hat (MLE)	3.175	k star (bias corrected MLE)	2.068				
420					Theta hat (MLE)	0.472	Theta star (bias corrected MLE)	0.725				
421					nu hat (MLE)	50.8	nu star (bias corrected)	33.09				
422					Adjusted Level of Significance (β)	0.0195						
423					Approximate Chi Square Value (33.09, α)	20.93	Adjusted Chi Square Value (33.09, β)	18.53				
424					95% Gamma Approximate UCL (use when n>=50)	2.369	95% Gamma Adjusted UCL (use when n<50)	2.676				
425												
426	Estimates of Gamma Parameters using KM Estimates											
427					Mean (KM)	1.588	SD (KM)	0.649				
428					Variance (KM)	0.421	SE of Mean (KM)	0.248				
429					k hat (KM)	5.985	k star (KM)	3.824				
430					nu hat (KM)	95.76	nu star (KM)	61.18				
431					theta hat (KM)	0.265	theta star (KM)	0.415				
432					80% gamma percentile (KM)	2.2	90% gamma percentile (KM)	2.676				

433					95% gamma percentile (KM)	3.114				99% gamma percentile (KM)		4.053
434												
435					**Gamma Kaplan-Meier (KM) Statistics**							
436					Approximate Chi Square Value (61.18, α)	44.19				Adjusted Chi Square Value (61.18, β)		40.57
437					95% Gamma Approximate KM-UCL (use when n>=50)	2.198				95% Gamma Adjusted KM-UCL (use when n<50)		2.394
438												
439					**Lognormal GOF Test on Detected Observations Only**							
440					Shapiro Wilk Test Statistic	0.89				**Shapiro Wilk GOF Test**		
441					5% Shapiro Wilk Critical Value	0.803				Detected Data appear Lognormal at 5% Significance Level		
442					Lilliefors Test Statistic	0.192				**Lilliefors GOF Test**		
443					5% Lilliefors Critical Value	0.304				Detected Data appear Lognormal at 5% Significance Level		
444					**Detected Data appear Lognormal at 5% Significance Level**							
445												
446					**Lognormal ROS Statistics Using Imputed Non-Detects**							
447					Mean in Original Scale	1.541				Mean in Log Scale		0.336
448					SD in Original Scale	0.748				SD in Log Scale		0.471
449					95% t UCL (assumes normality of ROS data)	2.043				95% Percentile Bootstrap UCL		1.975
450					95% BCA Bootstrap UCL	2.063				95% Bootstrap t UCL		2.243
451					95% H-UCL (Log ROS)	2.358						
452												
453					**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**							
454					KM Mean (logged)	0.393				KM Geo Mean		1.482
455					KM SD (logged)	0.355				95% Critical H Value (KM-Log)		2.131
456					KM Standard Error of Mean (logged)	0.136				95% H-UCL (KM -Log)		2.101
457					KM SD (logged)	0.355				95% Critical H Value (KM-Log)		2.131
458					KM Standard Error of Mean (logged)	0.136						
459												
460					**DL/2 Statistics**							
461					**DL/2 Normal**					**DL/2 Log-Transformed**		
462					Mean in Original Scale	1.525				Mean in Log Scale		0.307
463					SD in Original Scale	0.772				SD in Log Scale		0.531
464					95% t UCL (Assumes normality)	2.042				95% H-Stat UCL		2.537
465					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
466												
467					**Nonparametric Distribution Free UCL Statistics**							
468					**Detected Data appear Normal Distributed at 5% Significance Level**							
469												
470					**Suggested UCL to Use**							
471					95% KM (t) UCL	2.057						
472												
473					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
474					Recommendations are based upon data size, data distribution, and skewness.							
475					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
476					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
477												
478												
479	**Phenanthrene**											
480												
481					**General Statistics**							
482					Total Number of Observations	8				Number of Distinct Observations		7
483										Number of Missing Observations		0
484					Minimum	3.4				Mean		4.375
485					Maximum	5.8				Median		4.25
486					SD	0.846				Std. Error of Mean		0.299

487				Coefficient of Variation	0.193					Skewness	0.723	
488												
489					**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**							
490					**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**							
491					**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**							
492					**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**							
493												
494					**Normal GOF Test**							
495				Shapiro Wilk Test Statistic	0.913		**Shapiro Wilk GOF Test**					
496				5% Shapiro Wilk Critical Value	0.818		Data appear Normal at 5% Significance Level					
497				Lilliefors Test Statistic	0.238		**Lilliefors GOF Test**					
498				5% Lilliefors Critical Value	0.283		Data appear Normal at 5% Significance Level					
499					**Data appear Normal at 5% Significance Level**							
500												
501					**Assuming Normal Distribution**							
502					**95% Normal UCL**					**95% UCLs (Adjusted for Skewness)**		
503				95% Student's-t UCL	4.942					95% Adjusted-CLT UCL (Chen-1995)	4.949	
504										95% Modified-t UCL (Johnson-1978)	4.955	
505												
506					**Gamma GOF Test**							
507				A-D Test Statistic	0.332		**Anderson-Darling Gamma GOF Test**					
508				5% A-D Critical Value	0.716		Detected data appear Gamma Distributed at 5% Significance Level					
509				K-S Test Statistic	0.214		**Kolmogorov-Smirnov Gamma GOF Test**					
510				5% K-S Critical Value	0.294		Detected data appear Gamma Distributed at 5% Significance Level					
511					**Detected data appear Gamma Distributed at 5% Significance Level**							
512												
513					**Gamma Statistics**							
514				k hat (MLE)	31.92					k star (bias corrected MLE)	20.03	
515				Theta hat (MLE)	0.137					Theta star (bias corrected MLE)	0.218	
516				nu hat (MLE)	510.7					nu star (bias corrected)	320.5	
517				MLE Mean (bias corrected)	4.375					MLE Sd (bias corrected)	0.977	
518										Approximate Chi Square Value (0.05)	280.1	
519				Adjusted Level of Significance	0.0195					Adjusted Chi Square Value	270.5	
520												
521					**Assuming Gamma Distribution**							
522				95% Approximate Gamma UCL (use when n>=50))	5.007					95% Adjusted Gamma UCL (use when n<50)	5.185	
523												
524					**Lognormal GOF Test**							
525				Shapiro Wilk Test Statistic	0.935		**Shapiro Wilk Lognormal GOF Test**					
526				5% Shapiro Wilk Critical Value	0.818		Data appear Lognormal at 5% Significance Level					
527				Lilliefors Test Statistic	0.205		**Lilliefors Lognormal GOF Test**					
528				5% Lilliefors Critical Value	0.283		Data appear Lognormal at 5% Significance Level					
529					**Data appear Lognormal at 5% Significance Level**							
530												
531					**Lognormal Statistics**							
532				Minimum of Logged Data	1.224					Mean of logged Data	1.46	
533				Maximum of Logged Data	1.758					SD of logged Data	0.188	
534												
535					**Assuming Lognormal Distribution**							
536				95% H-UCL	5.028					90% Chebyshev (MVUE) UCL	5.247	
537				95% Chebyshev (MVUE) UCL	5.643					97.5% Chebyshev (MVUE) UCL	6.192	
538				99% Chebyshev (MVUE) UCL	7.272							
539												
540					**Nonparametric Distribution Free UCL Statistics**							

541	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
542												
543	**Nonparametric Distribution Free UCLs**											
544					95% CLT UCL	4.867			95% Jackknife UCL	4.942		
545					95% Standard Bootstrap UCL	4.831			95% Bootstrap-t UCL	5.266		
546					95% Hall's Bootstrap UCL	5.786			95% Percentile Bootstrap UCL	4.85		
547					95% BCA Bootstrap UCL	4.925						
548					90% Chebyshev(Mean, Sd) UCL	5.273			95% Chebyshev(Mean, Sd) UCL	5.679		
549					97.5% Chebyshev(Mean, Sd) UCL	6.244			99% Chebyshev(Mean, Sd) UCL	7.353		
550												
551	**Suggested UCL to Use**											
552					95% Student's-t UCL	4.942						
553												
554	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
555	Recommendations are based upon data size, data distribution, and skewness.											
556	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
557	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
558												
559												
560	**Benzene**											
561												
562	**General Statistics**											
563					Total Number of Observations	8			Number of Distinct Observations	8		
564									Number of Missing Observations	0		
565					Minimum	13			Mean	29.25		
566					Maximum	76			Median	22		
567					SD	20.29			Std. Error of Mean	7.173		
568					Coefficient of Variation	0.694			Skewness	2.169		
569												
570	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
571	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											
572	**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**											
573	**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**											
574												
575	**Normal GOF Test**											
576					Shapiro Wilk Test Statistic	0.731			**Shapiro Wilk GOF Test**			
577					5% Shapiro Wilk Critical Value	0.818			Data Not Normal at 5% Significance Level			
578					Lilliefors Test Statistic	0.314			**Lilliefors GOF Test**			
579					5% Lilliefors Critical Value	0.283			Data Not Normal at 5% Significance Level			
580	**Data Not Normal at 5% Significance Level**											
581												
582	**Assuming Normal Distribution**											
583	**95% Normal UCL**								**95% UCLs (Adjusted for Skewness)**			
584					95% Student's-t UCL	42.84			95% Adjusted-CLT UCL (Chen-1995)	46.93		
585									95% Modified-t UCL (Johnson-1978)	43.76		
586												
587	**Gamma GOF Test**											
588					A-D Test Statistic	0.6			**Anderson-Darling Gamma GOF Test**			
589					5% A-D Critical Value	0.72			Detected data appear Gamma Distributed at 5% Significance Level			
590					K-S Test Statistic	0.263			**Kolmogorov-Smirnov Gamma GOF Test**			
591					5% K-S Critical Value	0.296			Detected data appear Gamma Distributed at 5% Significance Level			
592	**Detected data appear Gamma Distributed at 5% Significance Level**											
593												
594	**Gamma Statistics**											

595					k hat (MLE)	3.472				k star (bias corrected MLE)		2.253
596					Theta hat (MLE)	8.425				Theta star (bias corrected MLE)		12.98
597					nu hat (MLE)	55.55				nu star (bias corrected)		36.05
598					MLE Mean (bias corrected)	29.25				MLE Sd (bias corrected)		19.49
599										Approximate Chi Square Value (0.05)		23.31
600					Adjusted Level of Significance	0.0195				Adjusted Chi Square Value		20.75
601												
602						**Assuming Gamma Distribution**							
603					95% Approximate Gamma UCL (use when n>=50)	45.24				95% Adjusted Gamma UCL (use when n<50)		50.81
604												
605						**Lognormal GOF Test**						
606					Shapiro Wilk Test Statistic	0.904				**Shapiro Wilk Lognormal GOF Test**		
607					5% Shapiro Wilk Critical Value	0.818				Data appear Lognormal at 5% Significance Level		
608					Lilliefors Test Statistic	0.226				**Lilliefors Lognormal GOF Test**		
609					5% Lilliefors Critical Value	0.283				Data appear Lognormal at 5% Significance Level		
610						**Data appear Lognormal at 5% Significance Level**						
611												
612						**Lognormal Statistics**						
613					Minimum of Logged Data	2.565				Mean of logged Data		3.225
614					Maximum of Logged Data	4.331				SD of logged Data		0.544
615												
616						**Assuming Lognormal Distribution**							
617					95% H-UCL	48.11				90% Chebyshev (MVUE) UCL		45.28
618					95% Chebyshev (MVUE) UCL	52.84				97.5% Chebyshev (MVUE) UCL		63.34
619					99% Chebyshev (MVUE) UCL	83.96						
620												
621						**Nonparametric Distribution Free UCL Statistics**							
622						**Data appear to follow a Discernible Distribution at 5% Significance Level**						
623												
624						**Nonparametric Distribution Free UCLs**							
625					95% CLT UCL	41.05				95% Jackknife UCL		42.84
626					95% Standard Bootstrap UCL	40.22				95% Bootstrap-t UCL		74.48
627					95% Hall's Bootstrap UCL	101.7				95% Percentile Bootstrap UCL		41.25
628					95% BCA Bootstrap UCL	46.88						
629					90% Chebyshev(Mean, Sd) UCL	50.77				95% Chebyshev(Mean, Sd) UCL		60.52
630					97.5% Chebyshev(Mean, Sd) UCL	74.05				99% Chebyshev(Mean, Sd) UCL		100.6
631												
632						**Suggested UCL to Use**							
633					95% Adjusted Gamma UCL	50.81						
634												
635						Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
636						Recommendations are based upon data size, data distribution, and skewness.							
637						These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
638						However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
639												
640	**Naphthalene**											
641												
642						**General Statistics**							
643					Total Number of Observations	8				Number of Distinct Observations		7
644					Number of Detects	7				Number of Non-Detects		1
645					Number of Distinct Detects	6				Number of Distinct Non-Detects		1
646					Minimum Detect	11				Minimum Non-Detect		20
647					Maximum Detect	240				Maximum Non-Detect		20
648					Variance Detects	6012				Percent Non-Detects		12.5%

649				Mean Detects	70.86					SD Detects	77.54	
650				Median Detects	42					CV Detects	1.094	
651				Skewness Detects	2.242					Kurtosis Detects	5.407	
652				Mean of Logged Detects	3.857					SD of Logged Detects	0.955	
653												
654				**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**								
655				**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**								
656				**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**								
657				**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**								
658												
659				**Normal GOF Test on Detects Only**								
660				Shapiro Wilk Test Statistic	0.715	**Shapiro Wilk GOF Test**						
661				5% Shapiro Wilk Critical Value	0.803	Detected Data Not Normal at 5% Significance Level						
662				Lilliefors Test Statistic	0.336	**Lilliefors GOF Test**						
663				5% Lilliefors Critical Value	0.304	Detected Data Not Normal at 5% Significance Level						
664				**Detected Data Not Normal at 5% Significance Level**								
665												
666				**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**								
667				KM Mean	63.38	KM Standard Error of Mean	26.74					
668				KM SD	70.01	95% KM (BCA) UCL	112.6					
669				95% KM (t) UCL	114	95% KM (Percentile Bootstrap) UCL	108.8					
670				95% KM (z) UCL	107.4	95% KM Bootstrap t UCL	193.1					
671				90% KM Chebyshev UCL	143.6	95% KM Chebyshev UCL	179.9					
672				97.5% KM Chebyshev UCL	230.3	99% KM Chebyshev UCL	329.4					
673												
674				**Gamma GOF Tests on Detected Observations Only**								
675				A-D Test Statistic	0.378	**Anderson-Darling GOF Test**						
676				5% A-D Critical Value	0.723	Detected data appear Gamma Distributed at 5% Significance Level						
677				K-S Test Statistic	0.219	**Kolmogorov-Smirnov GOF**						
678				5% K-S Critical Value	0.318	Detected data appear Gamma Distributed at 5% Significance Level						
679				**Detected data appear Gamma Distributed at 5% Significance Level**								
680												
681				**Gamma Statistics on Detected Data Only**								
682				k hat (MLE)	1.383	k star (bias corrected MLE)	0.885					
683				Theta hat (MLE)	51.25	Theta star (bias corrected MLE)	80.04					
684				nu hat (MLE)	19.36	nu star (bias corrected)	12.39					
685				Mean (detects)	70.86							
686												
687				**Gamma ROS Statistics using Imputed Non-Detects**								
688				GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs								
689				GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)								
690				For such situations, GROS method may yield incorrect values of UCLs and BTVs								
691				This is especially true when the sample size is small.								
692				For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates								
693				Minimum	0.01	Mean	62					
694				Maximum	240	Median	42					
695				SD	76.03	CV	1.226					
696				k hat (MLE)	0.481	k star (bias corrected MLE)	0.384					
697				Theta hat (MLE)	128.8	Theta star (bias corrected MLE)	161.4					
698				nu hat (MLE)	7.7	nu star (bias corrected)	6.146					
699				Adjusted Level of Significance (β)	0.0195							
700				Approximate Chi Square Value (6.15, α)	1.715	Adjusted Chi Square Value (6.15, β)	1.19					
701				95% Gamma Approximate UCL (use when n>=50)	222.2	95% Gamma Adjusted UCL (use when n<50)	320.2					
702												

703	**Estimates of Gamma Parameters using KM Estimates**											
704					Mean (KM)	63.38				SD (KM)	70.01	
705					Variance (KM)	4901				SE of Mean (KM)	26.74	
706					k hat (KM)	0.819				k star (KM)	0.595	
707					nu hat (KM)	13.11				nu star (KM)	9.528	
708					theta hat (KM)	77.34				theta star (KM)	106.4	
709					80% gamma percentile (KM)	104.5				90% gamma percentile (KM)	165.1	
710					95% gamma percentile (KM)	228.7				99% gamma percentile (KM)	382.5	
711												
712	**Gamma Kaplan-Meier (KM) Statistics**											
713					Approximate Chi Square Value (9.53, α)	3.649				Adjusted Chi Square Value (9.53, β)	2.79	
714					95% Gamma Approximate KM-UCL (use when n>=50)	165.5				95% Gamma Adjusted KM-UCL (use when n<50)	216.5	
715												
716	**Lognormal GOF Test on Detected Observations Only**											
717					Shapiro Wilk Test Statistic	0.971				**Shapiro Wilk GOF Test**		
718					5% Shapiro Wilk Critical Value	0.803				Detected Data appear Lognormal at 5% Significance Level		
719					Lilliefors Test Statistic	0.172				**Lilliefors GOF Test**		
720					5% Lilliefors Critical Value	0.304				Detected Data appear Lognormal at 5% Significance Level		
721	**Detected Data appear Lognormal at 5% Significance Level**											
722												
723	**Lognormal ROS Statistics Using Imputed Non-Detects**											
724					Mean in Original Scale	63.27				Mean in Log Scale	3.665	
725					SD in Original Scale	74.93				SD in Log Scale	1.039	
726					95% t UCL (assumes normality of ROS data)	113.5				95% Percentile Bootstrap UCL	110.8	
727					95% BCA Bootstrap UCL	137.3				95% Bootstrap t UCL	195.7	
728					95% H-UCL (Log ROS)	267.2						
729												
730	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
731					KM Mean (logged)	3.675				KM Geo Mean	39.44	
732					KM SD (logged)	0.958				95% Critical H Value (KM-Log)	3.323	
733					KM Standard Error of Mean (logged)	0.366				95% H-UCL (KM -Log)	207.8	
734					KM SD (logged)	0.958				95% Critical H Value (KM-Log)	3.323	
735					KM Standard Error of Mean (logged)	0.366						
736												
737	**DL/2 Statistics**											
738					**DL/2 Normal**					**DL/2 Log-Transformed**		
739					Mean in Original Scale	63.25				Mean in Log Scale	3.663	
740					SD in Original Scale	74.94				SD in Log Scale	1.041	
741					95% t UCL (Assumes normality)	113.4				95% H-Stat UCL	268.9	
742	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
743												
744	**Nonparametric Distribution Free UCL Statistics**											
745	**Detected Data appear Gamma Distributed at 5% Significance Level**											
746												
747	**Suggested UCL to Use**											
748					95% KM Bootstrap t UCL	193.1				Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1)	216.5	
749												
750	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
751	Recommendations are based upon data size, data distribution, and skewness.											
752	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
753	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
754												
755	**Vinyl Chloride**											
756												

757	**General Statistics**											
758					Total Number of Observations	8			Number of Distinct Observations	7		
759					Number of Detects	7			Number of Non-Detects	1		
760					Number of Distinct Detects	6			Number of Distinct Non-Detects	1		
761					Minimum Detect	4.5			Minimum Non-Detect	10		
762					Maximum Detect	29			Maximum Non-Detect	10		
763					Variance Detects	90.12			Percent Non-Detects	12.5%		
764					Mean Detects	16.23			SD Detects	9.493		
765					Median Detects	21			CV Detects	0.585		
766					Skewness Detects	-0.094			Kurtosis Detects	-1.974		
767					Mean of Logged Detects	2.592			SD of Logged Detects	0.723		
768												
769	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
770	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											
771	**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**											
772	**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**											
773												
774	**Normal GOF Test on Detects Only**											
775					Shapiro Wilk Test Statistic	0.87			**Shapiro Wilk GOF Test**			
776					5% Shapiro Wilk Critical Value	0.803			Detected Data appear Normal at 5% Significance Level			
777					Lilliefors Test Statistic	0.264			**Lilliefors GOF Test**			
778					5% Lilliefors Critical Value	0.304			Detected Data appear Normal at 5% Significance Level			
779	**Detected Data appear Normal at 5% Significance Level**											
780												
781	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
782					KM Mean	15.02			KM Standard Error of Mean	3.383		
783					KM SD	8.839			95% KM (BCA) UCL	20		
784					95% KM (t) UCL	21.43			95% KM (Percentile Bootstrap) UCL	20.15		
785					95% KM (z) UCL	20.58			95% KM Bootstrap t UCL	21.48		
786					90% KM Chebyshev UCL	25.17			95% KM Chebyshev UCL	29.76		
787					97.5% KM Chebyshev UCL	36.14			99% KM Chebyshev UCL	48.68		
788												
789	**Gamma GOF Tests on Detected Observations Only**											
790					A-D Test Statistic	0.629			**Anderson-Darling GOF Test**			
791					5% A-D Critical Value	0.713			Detected data appear Gamma Distributed at 5% Significance Level			
792					K-S Test Statistic	0.311			**Kolmogorov-Smirnov GOF**			
793					5% K-S Critical Value	0.314			Detected data appear Gamma Distributed at 5% Significance Level			
794	**Detected data appear Gamma Distributed at 5% Significance Level**											
795												
796	**Gamma Statistics on Detected Data Only**											
797					k hat (MLE)	2.717			k star (bias corrected MLE)	1.648		
798					Theta hat (MLE)	5.974			Theta star (bias corrected MLE)	9.85		
799					nu hat (MLE)	38.03			nu star (bias corrected)	23.07		
800					Mean (detects)	16.23						
801												
802	**Gamma ROS Statistics using Imputed Non-Detects**											
803	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
804	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
805	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
806	This is especially true when the sample size is small.											
807	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
808					Minimum	4.5			Mean	15.19		
809					Maximum	29			Median	14.44		
810					SD	9.271			CV	0.61		

811					k hat (MLE)	2.725				k star (bias corrected MLE)		1.786
812					Theta hat (MLE)	5.574				Theta star (bias corrected MLE)		8.502
813					nu hat (MLE)	43.59				nu star (bias corrected)		28.58
814					Adjusted Level of Significance (β)	0.0195						
815					Approximate Chi Square Value (28.58, α)	17.38				Adjusted Chi Square Value (28.58, β)		15.21
816					95% Gamma Approximate UCL (use when n>=50)	24.97				95% Gamma Adjusted UCL (use when n<50)		28.53
817												
818					**Estimates of Gamma Parameters using KM Estimates**							
819					Mean (KM)	15.02				SD (KM)		8.839
820					Variance (KM)	78.13				SE of Mean (KM)		3.383
821					k hat (KM)	2.886				k star (KM)		1.887
822					nu hat (KM)	46.18				nu star (KM)		30.2
823					theta hat (KM)	5.203				theta star (KM)		7.957
824					80% gamma percentile (KM)	22.64				90% gamma percentile (KM)		29.61
825					95% gamma percentile (KM)	36.28				99% gamma percentile (KM)		51.14
826												
827					**Gamma Kaplan-Meier (KM) Statistics**							
828					Approximate Chi Square Value (30.20, α)	18.65				Adjusted Chi Square Value (30.20, β)		16.39
829					95% Gamma Approximate KM-UCL (use when n>=50)	24.32				95% Gamma Adjusted KM-UCL (use when n<50)		27.66
830												
831					**Lognormal GOF Test on Detected Observations Only**							
832					Shapiro Wilk Test Statistic	0.853				**Shapiro Wilk GOF Test**		
833					5% Shapiro Wilk Critical Value	0.803				Detected Data appear Lognormal at 5% Significance Level		
834					Lilliefors Test Statistic	0.306				**Lilliefors GOF Test**		
835					5% Lilliefors Critical Value	0.304				Detected Data Not Lognormal at 5% Significance Level		
836					**Detected Data appear Approximate Lognormal at 5% Significance Level**							
837												
838					**Lognormal ROS Statistics Using Imputed Non-Detects**							
839					Mean in Original Scale	15.09				Mean in Log Scale		2.513
840					SD in Original Scale	9.361				SD in Log Scale		0.706
841					95% t UCL (assumes normality of ROS data)	21.36				95% Percentile Bootstrap UCL		20.08
842					95% BCA Bootstrap UCL	20.44				95% Bootstrap t UCL		21.7
843					95% H-UCL (Log ROS)	32.93						
844												
845					**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**							
846					KM Mean (logged)	2.499				KM Geo Mean		12.17
847					KM SD (logged)	0.678				95% Critical H Value (KM-Log)		2.69
848					KM Standard Error of Mean (logged)	0.262				95% H-UCL (KM -Log)		30.52
849					KM SD (logged)	0.678				95% Critical H Value (KM-Log)		2.69
850					KM Standard Error of Mean (logged)	0.262						
851												
852					**DL/2 Statistics**							
853					**DL/2 Normal**					**DL/2 Log-Transformed**		
854					Mean in Original Scale	14.83				Mean in Log Scale		2.469
855					SD in Original Scale	9.644				SD in Log Scale		0.754
856					95% t UCL (Assumes normality)	21.28				95% H-Stat UCL		35.37
857					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
858												
859					**Nonparametric Distribution Free UCL Statistics**							
860					**Detected Data appear Normal Distributed at 5% Significance Level**							
861												
862					**Suggested UCL to Use**							
863					95% KM (t) UCL	21.43						
864												

865	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
866	Recommendations are based upon data size, data distribution, and skewness.											
867	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
868	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
869												
870	**Xylenes**											
871												
872	**General Statistics**											
873						Total Number of Observations	8			Number of Distinct Observations	6	
874						Number of Detects	5			Number of Non-Detects	3	
875						Number of Distinct Detects	5			Number of Distinct Non-Detects	1	
876						Minimum Detect	15			Minimum Non-Detect	30	
877						Maximum Detect	84			Maximum Non-Detect	30	
878						Variance Detects	859			Percent Non-Detects	37.5%	
879						Mean Detects	32			SD Detects	29.31	
880						Median Detects	19			CV Detects	0.916	
881						Skewness Detects	2.148			Kurtosis Detects	4.666	
882						Mean of Logged Detects	3.227			SD of Logged Detects	0.699	
883												
884	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
885	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											
886	**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**											
887	**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**											
888												
889	**Normal GOF Test on Detects Only**											
890						Shapiro Wilk Test Statistic	0.665			**Shapiro Wilk GOF Test**		
891						5% Shapiro Wilk Critical Value	0.762			Detected Data Not Normal at 5% Significance Level		
892						Lilliefors Test Statistic	0.394			**Lilliefors GOF Test**		
893						5% Lilliefors Critical Value	0.343			Detected Data Not Normal at 5% Significance Level		
894	**Detected Data Not Normal at 5% Significance Level**											
895												
896	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
897						KM Mean	27.13			KM Standard Error of Mean	8.692	
898						KM SD	21.78			95% KM (BCA) UCL	37.88	
899						95% KM (t) UCL	43.59			95% KM (Percentile Bootstrap) UCL	42.13	
900						95% KM (z) UCL	41.42			95% KM Bootstrap t UCL	134.9	
901						90% KM Chebyshev UCL	53.2			95% KM Chebyshev UCL	65.01	
902						97.5% KM Chebyshev UCL	81.41			99% KM Chebyshev UCL	113.6	
903												
904	**Gamma GOF Tests on Detected Observations Only**											
905						A-D Test Statistic	0.763			**Anderson-Darling GOF Test**		
906						5% A-D Critical Value	0.684			Detected Data Not Gamma Distributed at 5% Significance Level		
907						K-S Test Statistic	0.351			**Kolmogorov-Smirnov GOF**		
908						5% K-S Critical Value	0.36			Detected data appear Gamma Distributed at 5% Significance Level		
909	**Detected data follow Appr. Gamma Distribution at 5% Significance Level**											
910												
911	**Gamma Statistics on Detected Data Only**											
912						k hat (MLE)	2.248			k star (bias corrected MLE)	1.032	
913						Theta hat (MLE)	14.24			Theta star (bias corrected MLE)	31	
914						nu hat (MLE)	22.48			nu star (bias corrected)	10.32	
915						Mean (detects)	32					
916												
917	**Gamma ROS Statistics using Imputed Non-Detects**											
918	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											

919	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
920	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
921	This is especially true when the sample size is small.											
922	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
923					Minimum	7.768			Mean	27.75		
924					Maximum	84			Median	19.4		
925					SD	24			CV	0.865		
926					k hat (MLE)	2.285			k star (bias corrected MLE)	1.512		
927					Theta hat (MLE)	12.14			Theta star (bias corrected MLE)	18.36		
928					nu hat (MLE)	36.56			nu star (bias corrected)	24.18		
929					Adjusted Level of Significance (β)	0.0195						
930					Approximate Chi Square Value (24.18, α)	13.99			Adjusted Chi Square Value (24.18, β)	12.07		
931					95% Gamma Approximate UCL (use when n>=50)	47.98			95% Gamma Adjusted UCL (use when n<50)	55.59		
932												
933	**Estimates of Gamma Parameters using KM Estimates**											
934					Mean (KM)	27.13			SD (KM)	21.78		
935					Variance (KM)	474.4			SE of Mean (KM)	8.692		
936					k hat (KM)	1.551			k star (KM)	1.053		
937					nu hat (KM)	24.82			nu star (KM)	16.84		
938					theta hat (KM)	17.49			theta star (KM)	25.77		
939					80% gamma percentile (KM)	43.47			90% gamma percentile (KM)	61.67		
940					95% gamma percentile (KM)	79.8			99% gamma percentile (KM)	121.7		
941												
942	**Gamma Kaplan-Meier (KM) Statistics**											
943					Approximate Chi Square Value (16.84, α)	8.561			Adjusted Chi Square Value (16.84, β)	7.119		
944					95% Gamma Approximate KM-UCL (use when n>=50)	53.37			95% Gamma Adjusted KM-UCL (use when n<50)	64.18		
945												
946	**Lognormal GOF Test on Detected Observations Only**											
947					Shapiro Wilk Test Statistic	0.785			**Shapiro Wilk GOF Test**			
948					5% Shapiro Wilk Critical Value	0.762			Detected Data appear Lognormal at 5% Significance Level			
949					Lilliefors Test Statistic	0.305			**Lilliefors GOF Test**			
950					5% Lilliefors Critical Value	0.343			Detected Data appear Lognormal at 5% Significance Level			
951	**Detected Data appear Lognormal at 5% Significance Level**											
952												
953	**Lognormal ROS Statistics Using Imputed Non-Detects**											
954					Mean in Original Scale	27.89			Mean in Log Scale	3.139		
955					SD in Original Scale	23.31			SD in Log Scale	0.585		
956					95% t UCL (assumes normality of ROS data)	43.5			95% Percentile Bootstrap UCL	42.79		
957					95% BCA Bootstrap UCL	49.91			95% Bootstrap t UCL	87.09		
958					95% H-UCL (Log ROS)	47.66						
959												
960	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
961					KM Mean (logged)	3.114			KM Geo Mean	22.52		
962					KM SD (logged)	0.528			95% Critical H Value (KM-Log)	2.402		
963					KM Standard Error of Mean (logged)	0.217			95% H-UCL (KM -Log)	41.8		
964					KM SD (logged)	0.528			95% Critical H Value (KM-Log)	2.402		
965					KM Standard Error of Mean (logged)	0.217						
966												
967	**DL/2 Statistics**											
968	**DL/2 Normal**								**DL/2 Log-Transformed**			
969					Mean in Original Scale	25.63			Mean in Log Scale	3.032		
970					SD in Original Scale	23.84			SD in Log Scale	0.593		
971					95% t UCL (Assumes normality)	41.59			95% H-Stat UCL	43.49		
972	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											

973												
974	**Nonparametric Distribution Free UCL Statistics**											
975	**Detected Data appear Approximate Gamma Distributed at 5% Significance Level**											
976												
977	**Suggested UCL to Use**											
978				95% KM Adjusted Gamma UCL	64.18			95% GROS Adjusted Gamma UCL	55.59			
979												
980	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
981	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
982												
983	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
984	Recommendations are based upon data size, data distribution, and skewness.											
985	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
986	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
987												
988												
989	**Methylphenol, 3- and 4-**											
990												
991	**General Statistics**											
992				Total Number of Observations	8			Number of Distinct Observations	8			
993								Number of Missing Observations	0			
994				Minimum	17			Mean	60			
995				Maximum	150			Median	45.5			
996				SD	45.64			Std. Error of Mean	16.14			
997				Coefficient of Variation	0.761			Skewness	1.447			
998												
999	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
1000	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											
1001	**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**											
1002	**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**											
1003												
1004	**Normal GOF Test**											
1005				Shapiro Wilk Test Statistic	0.802			**Shapiro Wilk GOF Test**				
1006				5% Shapiro Wilk Critical Value	0.818			Data Not Normal at 5% Significance Level				
1007				Lilliefors Test Statistic	0.354			**Lilliefors GOF Test**				
1008				5% Lilliefors Critical Value	0.283			Data Not Normal at 5% Significance Level				
1009	**Data Not Normal at 5% Significance Level**											
1010												
1011	**Assuming Normal Distribution**											
1012	**95% Normal UCL**							**95% UCLs (Adjusted for Skewness)**				
1013				95% Student's-t UCL	90.57			95% Adjusted-CLT UCL (Chen-1995)	95.37			
1014								95% Modified-t UCL (Johnson-1978)	91.95			
1015												
1016	**Gamma GOF Test**											
1017				A-D Test Statistic	0.502			**Anderson-Darling Gamma GOF Test**				
1018				5% A-D Critical Value	0.723			Detected data appear Gamma Distributed at 5% Significance Level				
1019				K-S Test Statistic	0.295			**Kolmogorov-Smirnov Gamma GOF Test**				
1020				5% K-S Critical Value	0.297			Detected data appear Gamma Distributed at 5% Significance Level				
1021	**Detected data appear Gamma Distributed at 5% Significance Level**											
1022												
1023	**Gamma Statistics**											
1024				k hat (MLE)	2.409			k star (bias corrected MLE)	1.589			
1025				Theta hat (MLE)	24.91			Theta star (bias corrected MLE)	37.76			
1026				nu hat (MLE)	38.55			nu star (bias corrected)	25.42			

1027					MLE Mean (bias corrected)	60				MLE Sd (bias corrected)		47.6
1028										Approximate Chi Square Value (0.05)		14.94
1029					Adjusted Level of Significance	0.0195				Adjusted Chi Square Value		12.95
1030												
1031					**Assuming Gamma Distribution**							
1032					95% Approximate Gamma UCL (use when n>=50)	102.1				95% Adjusted Gamma UCL (use when n<50)		117.8
1033												
1034					**Lognormal GOF Test**							
1035					Shapiro Wilk Test Statistic	0.937				**Shapiro Wilk Lognormal GOF Test**		
1036					5% Shapiro Wilk Critical Value	0.818				Data appear Lognormal at 5% Significance Level		
1037					Lilliefors Test Statistic	0.251				**Lilliefors Lognormal GOF Test**		
1038					5% Lilliefors Critical Value	0.283				Data appear Lognormal at 5% Significance Level		
1039					**Data appear Lognormal at 5% Significance Level**							
1040												
1041					**Lognormal Statistics**							
1042					Minimum of Logged Data	2.833				Mean of logged Data		3.873
1043					Maximum of Logged Data	5.011				SD of logged Data		0.697
1044												
1045					**Assuming Lognormal Distribution**							
1046					95% H-UCL	125.8				90% Chebyshev (MVUE) UCL		103.6
1047					95% Chebyshev (MVUE) UCL	123.8				97.5% Chebyshev (MVUE) UCL		151.7
1048					99% Chebyshev (MVUE) UCL	206.6						
1049												
1050					**Nonparametric Distribution Free UCL Statistics**							
1051					**Data appear to follow a Discernible Distribution at 5% Significance Level**							
1052												
1053					**Nonparametric Distribution Free UCLs**							
1054					95% CLT UCL	86.54				95% Jackknife UCL		90.57
1055					95% Standard Bootstrap UCL	85.31				95% Bootstrap-t UCL		163.6
1056					95% Hall's Bootstrap UCL	299.3				95% Percentile Bootstrap UCL		86
1057					95% BCA Bootstrap UCL	91.13						
1058					90% Chebyshev(Mean, Sd) UCL	108.4				95% Chebyshev(Mean, Sd) UCL		130.3
1059					97.5% Chebyshev(Mean, Sd) UCL	160.8				99% Chebyshev(Mean, Sd) UCL		220.6
1060												
1061					**Suggested UCL to Use**							
1062					95% Adjusted Gamma UCL	117.8						
1063												
1064					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
1065					Recommendations are based upon data size, data distribution, and skewness.							
1066					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
1067					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
1068												
1069												
1070	**Chloride**											
1071												
1072					**General Statistics**							
1073					Total Number of Observations	8				Number of Distinct Observations		8
1074										Number of Missing Observations		0
1075					Minimum	54000				Mean		134875
1076					Maximum	290000				Median		115000
1077					SD	76740				Std. Error of Mean		27132
1078					Coefficient of Variation	0.569				Skewness		1.336
1079												
1080					**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**							

1081	guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.											
1082	For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).											
1083	Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1											
1084												
1085	Normal GOF Test											
1086					Shapiro Wilk Test Statistic	0.886	Shapiro Wilk GOF Test					
1087					5% Shapiro Wilk Critical Value	0.818	Data appear Normal at 5% Significance Level					
1088					Lilliefors Test Statistic	0.223	Lilliefors GOF Test					
1089					5% Lilliefors Critical Value	0.283	Data appear Normal at 5% Significance Level					
1090	Data appear Normal at 5% Significance Level											
1091												
1092	Assuming Normal Distribution											
1093					95% Normal UCL		95% UCLs (Adjusted for Skewness)					
1094					95% Student's-t UCL	186278	95% Adjusted-CLT UCL (Chen-1995)	193199				
1095							95% Modified-t UCL (Johnson-1978)	188414				
1096												
1097	Gamma GOF Test											
1098					A-D Test Statistic	0.228	Anderson-Darling Gamma GOF Test					
1099					5% A-D Critical Value	0.719	Detected data appear Gamma Distributed at 5% Significance Level					
1100					K-S Test Statistic	0.155	Kolmogorov-Smirnov Gamma GOF Test					
1101					5% K-S Critical Value	0.295	Detected data appear Gamma Distributed at 5% Significance Level					
1102	Detected data appear Gamma Distributed at 5% Significance Level											
1103												
1104	Gamma Statistics											
1105					k hat (MLE)	4.065	k star (bias corrected MLE)	2.624				
1106					Theta hat (MLE)	33182	Theta star (bias corrected MLE)	51405				
1107					nu hat (MLE)	65.04	nu star (bias corrected)	41.98				
1108					MLE Mean (bias corrected)	134875	MLE Sd (bias corrected)	83266				
1109							Approximate Chi Square Value (0.05)	28.13				
1110					Adjusted Level of Significance	0.0195	Adjusted Chi Square Value	25.29				
1111												
1112	Assuming Gamma Distribution											
1113					95% Approximate Gamma UCL (use when n>=50))	201298	95% Adjusted Gamma UCL (use when n<50)	223849				
1114												
1115	Lognormal GOF Test											
1116					Shapiro Wilk Test Statistic	0.985	Shapiro Wilk Lognormal GOF Test					
1117					5% Shapiro Wilk Critical Value	0.818	Data appear Lognormal at 5% Significance Level					
1118					Lilliefors Test Statistic	0.128	Lilliefors Lognormal GOF Test					
1119					5% Lilliefors Critical Value	0.283	Data appear Lognormal at 5% Significance Level					
1120	Data appear Lognormal at 5% Significance Level											
1121												
1122	Lognormal Statistics											
1123					Minimum of Logged Data	10.9	Mean of logged Data	11.68				
1124					Maximum of Logged Data	12.58	SD of logged Data	0.534				
1125												
1126	Assuming Lognormal Distribution											
1127					95% H-UCL	222563	90% Chebyshev (MVUE) UCL	210977				
1128					95% Chebyshev (MVUE) UCL	245760	97.5% Chebyshev (MVUE) UCL	294038				
1129					99% Chebyshev (MVUE) UCL	388871						
1130												
1131	Nonparametric Distribution Free UCL Statistics											
1132	Data appear to follow a Discernible Distribution at 5% Significance Level											
1133												
1134	Nonparametric Distribution Free UCLs											

1135					95% CLT UCL	179502				95% Jackknife UCL	186278	
1136					95% Standard Bootstrap UCL	176690				95% Bootstrap-t UCL	237014	
1137					95% Hall's Bootstrap UCL	452001				95% Percentile Bootstrap UCL	178250	
1138					95% BCA Bootstrap UCL	190000						
1139					90% Chebyshev(Mean, Sd) UCL	216270				95% Chebyshev(Mean, Sd) UCL	253139	
1140					97.5% Chebyshev(Mean, Sd) UCL	304312				99% Chebyshev(Mean, Sd) UCL	404831	
1141												
1142					**Suggested UCL to Use**							
1143					95% Student's-t UCL	186278						
1144												
1145	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
1146	Recommendations are based upon data size, data distribution, and skewness.											
1147	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
1148	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
1149												
1150												
1151	**Total Dissolved Solids**											
1152												
1153					**General Statistics**							
1154					Total Number of Observations	8				Number of Distinct Observations	8	
1155										Number of Missing Observations	0	
1156					Minimum	1300000				Mean	2150000	
1157					Maximum	2900000				Median	2250000	
1158					SD	625643				Std. Error of Mean	221198	
1159					Coefficient of Variation	0.291				Skewness	-0.252	
1160												
1161	**Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use**											
1162	**guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.**											
1163	**For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).**											
1164	**Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1**											
1165												
1166					**Normal GOF Test**							
1167					Shapiro Wilk Test Statistic	0.917				**Shapiro Wilk GOF Test**		
1168					5% Shapiro Wilk Critical Value	0.818				Data appear Normal at 5% Significance Level		
1169					Lilliefors Test Statistic	0.155				**Lilliefors GOF Test**		
1170					5% Lilliefors Critical Value	0.283				Data appear Normal at 5% Significance Level		
1171					**Data appear Normal at 5% Significance Level**							
1172												
1173					**Assuming Normal Distribution**							
1174					**95% Normal UCL**					**95% UCLs (Adjusted for Skewness)**		
1175					95% Student's-t UCL	2569077				95% Adjusted-CLT UCL (Chen-1995)	2492780	
1176										95% Modified-t UCL (Johnson-1978)	2565792	
1177												
1178					**Gamma GOF Test**							
1179					A-D Test Statistic	0.38				**Anderson-Darling Gamma GOF Test**		
1180					5% A-D Critical Value	0.715				Detected data appear Gamma Distributed at 5% Significance Level		
1181					K-S Test Statistic	0.187				**Kolmogorov-Smirnov Gamma GOF Test**		
1182					5% K-S Critical Value	0.294				Detected data appear Gamma Distributed at 5% Significance Level		
1183					**Detected data appear Gamma Distributed at 5% Significance Level**							
1184												
1185					**Gamma Statistics**							
1186					k hat (MLE)	12.4				k star (bias corrected MLE)	7.831	
1187					Theta hat (MLE)	173448				Theta star (bias corrected MLE)	274564	
1188					nu hat (MLE)	198.3				nu star (bias corrected)	125.3	

1189					MLE Mean (bias corrected)	2150000				MLE Sd (bias corrected)		768318
1190										Approximate Chi Square Value (0.05)		100.4
1191					Adjusted Level of Significance	0.0195				Adjusted Chi Square Value		94.81
1192												
1193					**Assuming Gamma Distribution**							
1194					95% Approximate Gamma UCL (use when n>=50))	2681989				95% Adjusted Gamma UCL (use when n<50)		2841070
1195												
1196					**Lognormal GOF Test**							
1197					Shapiro Wilk Test Statistic	0.9				**Shapiro Wilk Lognormal GOF Test**		
1198					5% Shapiro Wilk Critical Value	0.818				Data appear Lognormal at 5% Significance Level		
1199					Lilliefors Test Statistic	0.185				**Lilliefors Lognormal GOF Test**		
1200					5% Lilliefors Critical Value	0.283				Data appear Lognormal at 5% Significance Level		
1201					**Data appear Lognormal at 5% Significance Level**							
1202												
1203					**Lognormal Statistics**							
1204					Minimum of Logged Data	14.08				Mean of logged Data		14.54
1205					Maximum of Logged Data	14.88				SD of logged Data		0.313
1206												
1207					**Assuming Lognormal Distribution**							
1208					95% H-UCL	2771405				90% Chebyshev (MVUE) UCL		2872909
1209					95% Chebyshev (MVUE) UCL	3198551				97.5% Chebyshev (MVUE) UCL		3650531
1210					99% Chebyshev (MVUE) UCL	4538357						
1211												
1212					**Nonparametric Distribution Free UCL Statistics**							
1213					**Data appear to follow a Discernible Distribution at 5% Significance Level**							
1214												
1215					**Nonparametric Distribution Free UCLs**							
1216					95% CLT UCL	2513838				95% Jackknife UCL		2569077
1217					95% Standard Bootstrap UCL	2483232				95% Bootstrap-t UCL		2587236
1218					95% Hall's Bootstrap UCL	2445776				95% Percentile Bootstrap UCL		2487500
1219					95% BCA Bootstrap UCL	2450000						
1220					90% Chebyshev(Mean, Sd) UCL	2813594				95% Chebyshev(Mean, Sd) UCL		3114180
1221					97.5% Chebyshev(Mean, Sd) UCL	3531381				99% Chebyshev(Mean, Sd) UCL		4350893
1222												
1223					**Suggested UCL to Use**							
1224					95% Student's-t UCL	2569077						
1225												
1226					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
1227					Recommendations are based upon data size, data distribution, and skewness.							
1228					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
1229					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
1230												
1231					**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be**							
1232					**reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.**							
1233												

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.13/31/2021 2:06:00 PM
From File	ProUCL Input File_South Flow Zone.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Total Chromium

General Statistics

Total Number of Observations	20	Number of Distinct Observations	11
Number of Detects	12	Number of Non-Detects	8
Number of Distinct Detects	10	Number of Distinct Non-Detects	1
Minimum Detect	16	Minimum Non-Detect	10
Maximum Detect	52	Maximum Non-Detect	10
Variance Detects	190.1	Percent Non-Detects	40%
Mean Detects	32.42	SD Detects	13.79
Median Detects	30.5	CV Detects	0.425
Skewness Detects	0.315	Kurtosis Detects	-1.53
Mean of Logged Detects	3.391	SD of Logged Detects	0.444

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.889	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.168	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	23.45	KM Standard Error of Mean	3.504
KM SD	15	95% KM (BCA) UCL	29.05
95% KM (t) UCL	29.51	95% KM (Percentile Bootstrap) UCL	29.5
95% KM (z) UCL	29.21	95% KM Bootstrap t UCL	30.79
90% KM Chebyshev UCL	33.96	95% KM Chebyshev UCL	38.73
97.5% KM Chebyshev UCL	45.33	99% KM Chebyshev UCL	58.32

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.465	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.732	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.185	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.246	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	5.867	k star (bias corrected MLE)	4.456
Theta hat (MLE)	5.525	Theta star (bias corrected MLE)	7.275
nu hat (MLE)	140.8	nu star (bias corrected)	106.9
Mean (detects)	32.42		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

55	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
56	This is especially true when the sample size is small.											
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
58					Minimum	0.01				Mean	21.4	
59					Maximum	52				Median	18	
60					SD	17.6				CV	0.823	
61					k hat (MLE)	0.597				k star (bias corrected MLE)	0.541	
62					Theta hat (MLE)	35.84				Theta star (bias corrected MLE)	39.57	
63					nu hat (MLE)	23.88				nu star (bias corrected)	21.63	
64					Adjusted Level of Significance (β)	0.038						
65					Approximate Chi Square Value (21.63, α)	12.06				Adjusted Chi Square Value (21.63, β)	11.5	
66					95% Gamma Approximate UCL (use when n>=50)	38.37				95% Gamma Adjusted UCL (use when n<50)	40.25	
67												
68	**Estimates of Gamma Parameters using KM Estimates**											
69					Mean (KM)	23.45				SD (KM)	15	
70					Variance (KM)	225.1				SE of Mean (KM)	3.504	
71					k hat (KM)	2.442				k star (KM)	2.109	
72					nu hat (KM)	97.7				nu star (KM)	84.38	
73					theta hat (KM)	9.601				theta star (KM)	11.12	
74					80% gamma percentile (KM)	34.89				90% gamma percentile (KM)	45.04	
75					95% gamma percentile (KM)	54.7				99% gamma percentile (KM)	76.05	
76												
77	**Gamma Kaplan-Meier (KM) Statistics**											
78					Approximate Chi Square Value (84.38, α)	64.2				Adjusted Chi Square Value (84.38, β)	62.81	
79					95% Gamma Approximate KM-UCL (use when n>=50)	30.82				95% Gamma Adjusted KM-UCL (use when n<50)	31.5	
80												
81	**Lognormal GOF Test on Detected Observations Only**											
82					Shapiro Wilk Test Statistic	0.904				**Shapiro Wilk GOF Test**		
83					5% Shapiro Wilk Critical Value	0.859				Detected Data appear Lognormal at 5% Significance Level		
84					Lilliefors Test Statistic	0.176				**Lilliefors GOF Test**		
85					5% Lilliefors Critical Value	0.243				Detected Data appear Lognormal at 5% Significance Level		
86	**Detected Data appear Lognormal at 5% Significance Level**											
87												
88	**Lognormal ROS Statistics Using Imputed Non-Detects**											
89					Mean in Original Scale	23.38				Mean in Log Scale	2.929	
90					SD in Original Scale	15.57				SD in Log Scale	0.703	
91					95% t UCL (assumes normality of ROS data)	29.4				95% Percentile Bootstrap UCL	28.84	
92					95% BCA Bootstrap UCL	29.75				95% Bootstrap t UCL	30.59	
93					95% H-UCL (Log ROS)	34.37						
94												
95	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
96					KM Mean (logged)	2.956				KM Geo Mean	19.21	
97					KM SD (logged)	0.627				95% Critical H Value (KM-Log)	2.152	
98					KM Standard Error of Mean (logged)	0.146				95% H-UCL (KM -Log)	31.86	
99					KM SD (logged)	0.627				95% Critical H Value (KM-Log)	2.152	
100					KM Standard Error of Mean (logged)	0.146						
101												
102	**DL/2 Statistics**											
103	**DL/2 Normal**									**DL/2 Log-Transformed**		
104					Mean in Original Scale	21.45				Mean in Log Scale	2.678	
105					SD in Original Scale	17.32				SD in Log Scale	0.957	
106					95% t UCL (Assumes normality)	28.15				95% H-Stat UCL	40.49	
107	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
108												

109	**Nonparametric Distribution Free UCL Statistics**											
110	**Detected Data appear Normal Distributed at 5% Significance Level**											
111												
112	**Suggested UCL to Use**											
113					95% KM (t) UCL	29.51						
114												
115	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
116	Recommendations are based upon data size, data distribution, and skewness.											
117	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
118	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
119												
120	**Mercury, Total**											
121												
122	**General Statistics**											
123					Total Number of Observations	20			Number of Distinct Observations	11		
124					Number of Detects	10			Number of Non-Detects	10		
125					Number of Distinct Detects	10			Number of Distinct Non-Detects	1		
126					Minimum Detect	9.0000E-4			Minimum Non-Detect	0.2		
127					Maximum Detect	0.113			Maximum Non-Detect	0.2		
128					Variance Detects	0.00223			Percent Non-Detects	50%		
129					Mean Detects	0.0526			SD Detects	0.0472		
130					Median Detects	0.0435			CV Detects	0.898		
131					Skewness Detects	0.183			Kurtosis Detects	-2.052		
132					Mean of Logged Detects	-3.799			SD of Logged Detects	1.765		
133												
134	**Normal GOF Test on Detects Only**											
135					Shapiro Wilk Test Statistic	0.838			**Shapiro Wilk GOF Test**			
136					5% Shapiro Wilk Critical Value	0.842			Detected Data Not Normal at 5% Significance Level			
137					Lilliefors Test Statistic	0.221			**Lilliefors GOF Test**			
138					5% Lilliefors Critical Value	0.262			Detected Data appear Normal at 5% Significance Level			
139	**Detected Data appear Approximate Normal at 5% Significance Level**											
140												
141	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
142					KM Mean	0.0526			KM Standard Error of Mean	0.0149		
143					KM SD	0.0448			95% KM (BCA) UCL	0.0769		
144					95% KM (t) UCL	0.0784			95% KM (Percentile Bootstrap) UCL	0.0756		
145					95% KM (z) UCL	0.0771			95% KM Bootstrap t UCL	0.0821		
146					90% KM Chebyshev UCL	0.0973			95% KM Chebyshev UCL	0.118		
147					97.5% KM Chebyshev UCL	0.146			99% KM Chebyshev UCL	0.201		
148												
149	**Gamma GOF Tests on Detected Observations Only**											
150					A-D Test Statistic	0.601			**Anderson-Darling GOF Test**			
151					5% A-D Critical Value	0.76			Detected data appear Gamma Distributed at 5% Significance Level			
152					K-S Test Statistic	0.228			**Kolmogorov-Smirnov GOF**			
153					5% K-S Critical Value	0.277			Detected data appear Gamma Distributed at 5% Significance Level			
154	**Detected data appear Gamma Distributed at 5% Significance Level**											
155												
156	**Gamma Statistics on Detected Data Only**											
157					k hat (MLE)	0.707			k star (bias corrected MLE)	0.562		
158					Theta hat (MLE)	0.0743			Theta star (bias corrected MLE)	0.0936		
159					nu hat (MLE)	14.14			nu star (bias corrected)	11.23		
160					Mean (detects)	0.0526						
161												
162	**Gamma ROS Statistics using Imputed Non-Detects**											

163	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
164	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
165	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
166	This is especially true when the sample size is small.											
167	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
168						Minimum	9.0000E-4				Mean	0.0526
169						Maximum	0.143				Median	0.0412
170						SD	0.0436				CV	0.829
171						k hat (MLE)	1.007				k star (bias corrected MLE)	0.889
172						Theta hat (MLE)	0.0522				Theta star (bias corrected MLE)	0.0591
173						nu hat (MLE)	40.26				nu star (bias corrected)	35.56
174						Adjusted Level of Significance (β)	0.038					
175						Approximate Chi Square Value (35.56, α)	22.91				Adjusted Chi Square Value (35.56, β)	22.11
176						95% Gamma Approximate UCL (use when n>=50)	0.0816				95% Gamma Adjusted UCL (use when n<50)	0.0845
177												
178	**Estimates of Gamma Parameters using KM Estimates**											
179						Mean (KM)	0.0526				SD (KM)	0.0448
180						Variance (KM)	0.002				SE of Mean (KM)	0.0149
181						k hat (KM)	1.378				k star (KM)	1.205
182						nu hat (KM)	55.14				nu star (KM)	48.2
183						theta hat (KM)	0.0381				theta star (KM)	0.0436
184						80% gamma percentile (KM)	0.0832				90% gamma percentile (KM)	0.116
185						95% gamma percentile (KM)	0.148				99% gamma percentile (KM)	0.221
186												
187	**Gamma Kaplan-Meier (KM) Statistics**											
188						Approximate Chi Square Value (48.20, α)	33.27				Adjusted Chi Square Value (48.20, β)	32.29
189						95% Gamma Approximate KM-UCL (use when n>=50)	0.0762				95% Gamma Adjusted KM-UCL (use when n<50)	0.0785
190												
191	**Lognormal GOF Test on Detected Observations Only**											
192						Shapiro Wilk Test Statistic	0.852				**Shapiro Wilk GOF Test**	
193						5% Shapiro Wilk Critical Value	0.842				Detected Data appear Lognormal at 5% Significance Level	
194						Lilliefors Test Statistic	0.218				**Lilliefors GOF Test**	
195						5% Lilliefors Critical Value	0.262				Detected Data appear Lognormal at 5% Significance Level	
196	**Detected Data appear Lognormal at 5% Significance Level**											
197												
198	**Lognormal ROS Statistics Using Imputed Non-Detects**											
199						Mean in Original Scale	0.0584				Mean in Log Scale	-3.799
200						SD in Original Scale	0.0754				SD in Log Scale	1.663
201						95% t UCL (assumes normality of ROS data)	0.0875				95% Percentile Bootstrap UCL	0.0864
202						95% BCA Bootstrap UCL	0.0943				95% Bootstrap t UCL	0.104
203						95% H-UCL (Log ROS)	0.367					
204												
205	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
206						KM Mean (logged)	-3.799				KM Geo Mean	0.0224
207						KM SD (logged)	1.674				95% Critical H Value (KM-Log)	3.725
208						KM Standard Error of Mean (logged)	0.558				95% H-UCL (KM -Log)	0.38
209						KM SD (logged)	1.674				95% Critical H Value (KM-Log)	3.725
210						KM Standard Error of Mean (logged)	0.558					
211												
212	**DL/2 Statistics**											
213	**DL/2 Normal**										**DL/2 Log-Transformed**	
214						Mean in Original Scale	0.0763				Mean in Log Scale	-3.051
215						SD in Original Scale	0.0406				SD in Log Scale	1.437
216						95% t UCL (Assumes normality)	0.092				95% H-Stat UCL	0.397

	A	B	C	D	E	F	G	H	I	J	K	L
217	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
218												
219	**Nonparametric Distribution Free UCL Statistics**											
220	**Detected Data appear Approximate Normal Distributed at 5% Significance Level**											
221												
222	**Suggested UCL to Use**											
223					95% KM (t) UCL	0.0784						
224												
225	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
226	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
227												
228	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
229	Recommendations are based upon data size, data distribution, and skewness.											
230	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
231	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
232												
233	**Silver**											
234												
235	**General Statistics**											
236					Total Number of Observations	20			Number of Distinct Observations	2		
237					Number of Detects	1			Number of Non-Detects	19		
238					Number of Distinct Detects	1			Number of Distinct Non-Detects	1		
239												
240	**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**											
241	**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**											
242												
243	**The data set for variable Silver was not processed!**											
244												
245												
246	**Methylphenol, 3- and 4-**											
247												
248	**General Statistics**											
249					Total Number of Observations	20			Number of Distinct Observations	5		
250					Number of Detects	4			Number of Non-Detects	16		
251					Number of Distinct Detects	4			Number of Distinct Non-Detects	1		
252					Minimum Detect	30			Minimum Non-Detect	10		
253					Maximum Detect	110			Maximum Non-Detect	10		
254					Variance Detects	1111			Percent Non-Detects	80%		
255					Mean Detects	73			SD Detects	33.34		
256					Median Detects	76			CV Detects	0.457		
257					Skewness Detects	-0.502			Kurtosis Detects	0.813		
258					Mean of Logged Detects	4.189			SD of Logged Detects	0.559		
259												
260	**Normal GOF Test on Detects Only**											
261					Shapiro Wilk Test Statistic	0.986			**Shapiro Wilk GOF Test**			
262					5% Shapiro Wilk Critical Value	0.748			Detected Data appear Normal at 5% Significance Level			
263					Lilliefors Test Statistic	0.202			**Lilliefors GOF Test**			
264					5% Lilliefors Critical Value	0.375			Detected Data appear Normal at 5% Significance Level			
265	**Detected Data appear Normal at 5% Significance Level**											
266												
267	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
268					KM Mean	22.6			KM Standard Error of Mean	7.311		
269					KM SD	28.32			95% KM (BCA) UCL	N/A		
270					95% KM (t) UCL	35.24			95% KM (Percentile Bootstrap) UCL	N/A		

271				95% KM (z) UCL	34.63					95% KM Bootstrap t UCL	N/A	
272				90% KM Chebyshev UCL	44.53					95% KM Chebyshev UCL	54.47	
273				97.5% KM Chebyshev UCL	68.26					99% KM Chebyshev UCL	95.34	
274												
275				**Gamma GOF Tests on Detected Observations Only**								
276				A-D Test Statistic	0.303			**Anderson-Darling GOF Test**				
277				5% A-D Critical Value	0.659			Detected data appear Gamma Distributed at 5% Significance Level				
278				K-S Test Statistic	0.259			**Kolmogorov-Smirnov GOF**				
279				5% K-S Critical Value	0.396			Detected data appear Gamma Distributed at 5% Significance Level				
280				**Detected data appear Gamma Distributed at 5% Significance Level**								
281												
282				**Gamma Statistics on Detected Data Only**								
283				k hat (MLE)	5.072			k star (bias corrected MLE)	1.435			
284				Theta hat (MLE)	14.39			Theta star (bias corrected MLE)	50.88			
285				nu hat (MLE)	40.58			nu star (bias corrected)	11.48			
286				Mean (detects)	73							
287												
288				**Gamma ROS Statistics using Imputed Non-Detects**								
289				GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs								
290				GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)								
291				For such situations, GROS method may yield incorrect values of UCLs and BTVs								
292				This is especially true when the sample size is small.								
293				For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates								
294				Minimum	0.01			Mean	15.48			
295				Maximum	110			Median	0.01			
296				SD	32.5			CV	2.1			
297				k hat (MLE)	0.155			k star (bias corrected MLE)	0.165			
298				Theta hat (MLE)	99.91			Theta star (bias corrected MLE)	93.8			
299				nu hat (MLE)	6.198			nu star (bias corrected)	6.602			
300				Adjusted Level of Significance (β)	0.038							
301				Approximate Chi Square Value (6.60, α)	1.955			Adjusted Chi Square Value (6.60, β)	1.762			
302				95% Gamma Approximate UCL (use when n>=50)	52.29			95% Gamma Adjusted UCL (use when n<50)	N/A			
303												
304				**Estimates of Gamma Parameters using KM Estimates**								
305				Mean (KM)	22.6			SD (KM)	28.32			
306				Variance (KM)	801.7			SE of Mean (KM)	7.311			
307				k hat (KM)	0.637			k star (KM)	0.575			
308				nu hat (KM)	25.48			nu star (KM)	22.99			
309				theta hat (KM)	35.48			theta star (KM)	39.32			
310				80% gamma percentile (KM)	37.25			90% gamma percentile (KM)	59.34			
311				95% gamma percentile (KM)	82.59			99% gamma percentile (KM)	139			
312												
313				**Gamma Kaplan-Meier (KM) Statistics**								
314				Approximate Chi Square Value (22.99, α)	13.09			Adjusted Chi Square Value (22.99, β)	12.5			
315				95% Gamma Approximate KM-UCL (use when n>=50)	39.71			95% Gamma Adjusted KM-UCL (use when n<50)	41.58			
316												
317				**Lognormal GOF Test on Detected Observations Only**								
318				Shapiro Wilk Test Statistic	0.911			**Shapiro Wilk GOF Test**				
319				5% Shapiro Wilk Critical Value	0.748			Detected Data appear Lognormal at 5% Significance Level				
320				Lilliefors Test Statistic	0.282			**Lilliefors GOF Test**				
321				5% Lilliefors Critical Value	0.375			Detected Data appear Lognormal at 5% Significance Level				
322				**Detected Data appear Lognormal at 5% Significance Level**								
323												
324				**Lognormal ROS Statistics Using Imputed Non-Detects**								

325					Mean in Original Scale	21.05					Mean in Log Scale	2.16
326					SD in Original Scale	30.42					SD in Log Scale	1.416
327					95% t UCL (assumes normality of ROS data)	32.81					95% Percentile Bootstrap UCL	33.32
328					95% BCA Bootstrap UCL	36.5					95% Bootstrap t UCL	40.58
329					95% H-UCL (Log ROS)	68.68						
330												
331					**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**							
332					KM Mean (logged)	2.68					KM Geo Mean	14.58
333					KM SD (logged)	0.785					95% Critical H Value (KM-Log)	2.34
334					KM Standard Error of Mean (logged)	0.203					95% H-UCL (KM -Log)	30.24
335					KM SD (logged)	0.785					95% Critical H Value (KM-Log)	2.34
336					KM Standard Error of Mean (logged)	0.203						
337												
338					**DL/2 Statistics**							
339					**DL/2 Normal**						**DL/2 Log-Transformed**	
340					Mean in Original Scale	18.6					Mean in Log Scale	2.125
341					SD in Original Scale	30.89					SD in Log Scale	1.082
342					95% t UCL (Assumes normality)	30.54					95% H-Stat UCL	29.77
343					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
344												
345					**Nonparametric Distribution Free UCL Statistics**							
346					**Detected Data appear Normal Distributed at 5% Significance Level**							
347												
348					**Suggested UCL to Use**							
349					95% KM (t) UCL	35.24						
350												
351					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
352					Recommendations are based upon data size, data distribution, and skewness.							
353					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
354					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
355												
356	**Phenanthrene**											
357												
358					**General Statistics**							
359					Total Number of Observations	20					Number of Distinct Observations	3
360					Number of Detects	1					Number of Non-Detects	19
361					Number of Distinct Detects	1					Number of Distinct Non-Detects	2
362												
363					**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**							
364					**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**							
365												
366					**The data set for variable Phenanthrene was not processed!**							
367												
368												
369	**Naphthalene**											
370												
371					**General Statistics**							
372					Total Number of Observations	20					Number of Distinct Observations	9
373					Number of Detects	7					Number of Non-Detects	13
374					Number of Distinct Detects	7					Number of Distinct Non-Detects	2
375					Minimum Detect	7.6					Minimum Non-Detect	5
376					Maximum Detect	140					Maximum Non-Detect	20
377					Variance Detects	3468					Percent Non-Detects	65%
378					Mean Detects	70.47					SD Detects	58.89

379				Median Detects	96					CV Detects	0.836	
380				Skewness Detects	-0.181					Kurtosis Detects	-2.492	
381				Mean of Logged Detects	3.655					SD of Logged Detects	1.373	
382												
383				**Normal GOF Test on Detects Only**								
384				Shapiro Wilk Test Statistic	0.814	**Shapiro Wilk GOF Test**						
385				5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level						
386				Lilliefors Test Statistic	0.272	**Lilliefors GOF Test**						
387				5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level						
388				**Detected Data appear Normal at 5% Significance Level**								
389												
390				**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**								
391				KM Mean	28.12	KM Standard Error of Mean	10.82					
392				KM SD	44.8	95% KM (BCA) UCL	47.13					
393				95% KM (t) UCL	46.83	95% KM (Percentile Bootstrap) UCL	45.23					
394				95% KM (z) UCL	45.92	95% KM Bootstrap t UCL	49.45					
395				90% KM Chebyshev UCL	60.59	95% KM Chebyshev UCL	75.3					
396				97.5% KM Chebyshev UCL	95.71	99% KM Chebyshev UCL	135.8					
397												
398				**Gamma GOF Tests on Detected Observations Only**								
399				A-D Test Statistic	0.874	**Anderson-Darling GOF Test**						
400				5% A-D Critical Value	0.729	Detected Data Not Gamma Distributed at 5% Significance Level						
401				K-S Test Statistic	0.315	**Kolmogorov-Smirnov GOF**						
402				5% K-S Critical Value	0.32	Detected data appear Gamma Distributed at 5% Significance Level						
403				**Detected data follow Appr. Gamma Distribution at 5% Significance Level**								
404												
405				**Gamma Statistics on Detected Data Only**								
406				k hat (MLE)	0.965	k star (bias corrected MLE)	0.647					
407				Theta hat (MLE)	73	Theta star (bias corrected MLE)	108.9					
408				nu hat (MLE)	13.51	nu star (bias corrected)	9.056					
409				Mean (detects)	70.47							
410												
411				**Gamma ROS Statistics using Imputed Non-Detects**								
412				GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs								
413				GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)								
414				For such situations, GROS method may yield incorrect values of UCLs and BTVs								
415				This is especially true when the sample size is small.								
416				For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates								
417				Minimum	0.01	Mean	25.1					
418				Maximum	140	Median	0.01					
419				SD	47.6	CV	1.896					
420				k hat (MLE)	0.165	k star (bias corrected MLE)	0.173					
421				Theta hat (MLE)	152.3	Theta star (bias corrected MLE)	144.7					
422				nu hat (MLE)	6.592	nu star (bias corrected)	6.937					
423				Adjusted Level of Significance (β)	0.038							
424				Approximate Chi Square Value (6.94, α)	2.136	Adjusted Chi Square Value (6.94, β)	1.932					
425				95% Gamma Approximate UCL (use when n>=50)	81.52	95% Gamma Adjusted UCL (use when n<50)	90.13					
426												
427				**Estimates of Gamma Parameters using KM Estimates**								
428				Mean (KM)	28.12	SD (KM)	44.8					
429				Variance (KM)	2007	SE of Mean (KM)	10.82					
430				k hat (KM)	0.394	k star (KM)	0.368					
431				nu hat (KM)	15.76	nu star (KM)	14.73					
432				theta hat (KM)	71.37	theta star (KM)	76.37					

433					80% gamma percentile (KM)	44.89					90% gamma percentile (KM)	80.55
434					95% gamma percentile (KM)	120.2					99% gamma percentile (KM)	220.8
435												
436	**Gamma Kaplan-Meier (KM) Statistics**											
437					Approximate Chi Square Value (14.73, α)	7.073					Adjusted Chi Square Value (14.73, β)	6.656
438					95% Gamma Approximate KM-UCL (use when n>=50)	58.55					95% Gamma Adjusted KM-UCL (use when n<50)	62.22
439												
440	**Lognormal GOF Test on Detected Observations Only**											
441					Shapiro Wilk Test Statistic	0.761	**Shapiro Wilk GOF Test**					
442					5% Shapiro Wilk Critical Value	0.803	Detected Data Not Lognormal at 5% Significance Level					
443					Lilliefors Test Statistic	0.318	**Lilliefors GOF Test**					
444					5% Lilliefors Critical Value	0.304	Detected Data Not Lognormal at 5% Significance Level					
445	**Detected Data Not Lognormal at 5% Significance Level**											
446												
447	**Lognormal ROS Statistics Using Imputed Non-Detects**											
448					Mean in Original Scale	25.85					Mean in Log Scale	1.198
449					SD in Original Scale	47.19					SD in Log Scale	2.291
450					95% t UCL (assumes normality of ROS data)	44.1					95% Percentile Bootstrap UCL	44.27
451					95% BCA Bootstrap UCL	47.51					95% Bootstrap t UCL	55.48
452					95% H-UCL (Log ROS)	580.8						
453												
454	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
455					KM Mean (logged)	2.355					KM Geo Mean	10.53
456					KM SD (logged)	1.222					95% Critical H Value (KM-Log)	2.97
457					KM Standard Error of Mean (logged)	0.297					95% H-UCL (KM -Log)	51.08
458					KM SD (logged)	1.222					95% Critical H Value (KM-Log)	2.97
459					KM Standard Error of Mean (logged)	0.297						
460												
461	**DL/2 Statistics**											
462					**DL/2 Normal**						**DL/2 Log-Transformed**	
463					Mean in Original Scale	27.79					Mean in Log Scale	2.152
464					SD in Original Scale	46.22					SD in Log Scale	1.468
465					95% t UCL (Assumes normality)	45.66					95% H-Stat UCL	78.69
466	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
467												
468	**Nonparametric Distribution Free UCL Statistics**											
469	**Detected Data appear Normal Distributed at 5% Significance Level**											
470												
471	**Suggested UCL to Use**											
472					95% KM (t) UCL	46.83						
473												
474	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
475	Recommendations are based upon data size, data distribution, and skewness.											
476	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
477	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
478												
479	**1,2,4-Trimethylbenzene**											
480												
481	**General Statistics**											
482					Total Number of Observations	20					Number of Distinct Observations	10
483					Number of Detects	7					Number of Non-Detects	13
484					Number of Distinct Detects	7					Number of Distinct Non-Detects	3
485					Minimum Detect	3.8					Minimum Non-Detect	1
486					Maximum Detect	51					Maximum Non-Detect	10

487				Variance Detects	511.1					Percent Non-Detects	65%	
488				Mean Detects	27.9					SD Detects	22.61	
489				Median Detects	40					CV Detects	0.81	
490				Skewness Detects	-0.258					Kurtosis Detects	-2.636	
491				Mean of Logged Detects	2.786					SD of Logged Detects	1.291	
492												
493				**Normal GOF Test on Detects Only**								
494				Shapiro Wilk Test Statistic	0.77				**Shapiro Wilk GOF Test**			
495				5% Shapiro Wilk Critical Value	0.803				Detected Data Not Normal at 5% Significance Level			
496				Lilliefors Test Statistic	0.28				**Lilliefors GOF Test**			
497				5% Lilliefors Critical Value	0.304				Detected Data appear Normal at 5% Significance Level			
498				**Detected Data appear Approximate Normal at 5% Significance Level**								
499												
500				**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**								
501				KM Mean	10.57					KM Standard Error of Mean	4.293	
502				KM SD	17.76					95% KM (BCA) UCL	17.91	
503				95% KM (t) UCL	17.99					95% KM (Percentile Bootstrap) UCL	17.43	
504				95% KM (z) UCL	17.63					95% KM Bootstrap t UCL	20.38	
505				90% KM Chebyshev UCL	23.45					95% KM Chebyshev UCL	29.28	
506				97.5% KM Chebyshev UCL	37.38					99% KM Chebyshev UCL	53.29	
507												
508				**Gamma GOF Tests on Detected Observations Only**								
509				A-D Test Statistic	1.007				**Anderson-Darling GOF Test**			
510				5% A-D Critical Value	0.727				Detected Data Not Gamma Distributed at 5% Significance Level			
511				K-S Test Statistic	0.334				**Kolmogorov-Smirnov GOF**			
512				5% K-S Critical Value	0.319				Detected Data Not Gamma Distributed at 5% Significance Level			
513				**Detected Data Not Gamma Distributed at 5% Significance Level**								
514												
515				**Gamma Statistics on Detected Data Only**								
516				k hat (MLE)	1.056					k star (bias corrected MLE)	0.699	
517				Theta hat (MLE)	26.41					Theta star (bias corrected MLE)	39.93	
518				nu hat (MLE)	14.79					nu star (bias corrected)	9.783	
519				Mean (detects)	27.9							
520												
521				**Gamma ROS Statistics using Imputed Non-Detects**								
522				GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs								
523				GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)								
524				For such situations, GROS method may yield incorrect values of UCLs and BTVs								
525				This is especially true when the sample size is small.								
526				For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates								
527				Minimum	0.01					Mean	10	
528				Maximum	51					Median	0.01	
529				SD	18.55					CV	1.854	
530				k hat (MLE)	0.185					k star (bias corrected MLE)	0.191	
531				Theta hat (MLE)	53.94					Theta star (bias corrected MLE)	52.38	
532				nu hat (MLE)	7.419					nu star (bias corrected)	7.64	
533				Adjusted Level of Significance (β)	0.038							
534				Approximate Chi Square Value (7.64, α)	2.528					Adjusted Chi Square Value (7.64, β)	2.302	
535				95% Gamma Approximate UCL (use when n>=50)	30.23					95% Gamma Adjusted UCL (use when n<50)	33.21	
536												
537				**Estimates of Gamma Parameters using KM Estimates**								
538				Mean (KM)	10.57					SD (KM)	17.76	
539				Variance (KM)	315.5					SE of Mean (KM)	4.293	
540				k hat (KM)	0.354					k star (KM)	0.334	

541					nu hat (KM)	14.16					nu star (KM)	13.37
542					theta hat (KM)	29.85					theta star (KM)	31.61
543					80% gamma percentile (KM)	16.6					90% gamma percentile (KM)	30.73
544					95% gamma percentile (KM)	46.67					99% gamma percentile (KM)	87.56
545												
546					**Gamma Kaplan-Meier (KM) Statistics**							
547					Approximate Chi Square Value (13.37, α)	6.145					Adjusted Chi Square Value (13.37, β)	5.76
548					95% Gamma Approximate KM-UCL (use when n>=50)	23					95% Gamma Adjusted KM-UCL (use when n<50)	24.54
549												
550					**Lognormal GOF Test on Detected Observations Only**							
551					Shapiro Wilk Test Statistic	0.723					**Shapiro Wilk GOF Test**	
552					5% Shapiro Wilk Critical Value	0.803					Detected Data Not Lognormal at 5% Significance Level	
553					Lilliefors Test Statistic	0.329					**Lilliefors GOF Test**	
554					5% Lilliefors Critical Value	0.304					Detected Data Not Lognormal at 5% Significance Level	
555					**Detected Data Not Lognormal at 5% Significance Level**							
556												
557					**Lognormal ROS Statistics Using Imputed Non-Detects**							
558					Mean in Original Scale	10.34					Mean in Log Scale	0.533
559					SD in Original Scale	18.35					SD in Log Scale	2.066
560					95% t UCL (assumes normality of ROS data)	17.44					95% Percentile Bootstrap UCL	17.49
561					95% BCA Bootstrap UCL	18.52					95% Bootstrap t UCL	21.43
562					95% H-UCL (Log ROS)	117.3						
563												
564					**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**							
565					KM Mean (logged)	1.045					KM Geo Mean	2.845
566					KM SD (logged)	1.491					95% Critical H Value (KM-Log)	3.411
567					KM Standard Error of Mean (logged)	0.368					95% H-UCL (KM -Log)	27.74
568					KM SD (logged)	1.491					95% Critical H Value (KM-Log)	3.411
569					KM Standard Error of Mean (logged)	0.368						
570												
571					**DL/2 Statistics**							
572					**DL/2 Normal**						**DL/2 Log-Transformed**	
573					Mean in Original Scale	11.1					Mean in Log Scale	1.122
574					SD in Original Scale	18					SD in Log Scale	1.662
575					95% t UCL (Assumes normality)	18.06					95% H-Stat UCL	50.26
576					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
577												
578					**Nonparametric Distribution Free UCL Statistics**							
579					**Detected Data appear Approximate Normal Distributed at 5% Significance Level**							
580												
581					**Suggested UCL to Use**							
582					95% KM (t) UCL	17.99						
583												
584					When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test							
585					When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL							
586												
587					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
588					Recommendations are based upon data size, data distribution, and skewness.							
589					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
590					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
591												
592												
593	**Total Dissolved Solids**											
594												

595	**General Statistics**											
596					Total Number of Observations	20				Number of Distinct Observations	14	
597										Number of Missing Observations	0	
598					Minimum	440000				Mean	1115000	
599					Maximum	1800000				Median	1200000	
600					SD	464707				Std. Error of Mean	103912	
601					Coefficient of Variation	0.417				Skewness	-0.0102	
602												
603	**Normal GOF Test**											
604					Shapiro Wilk Test Statistic	0.924	**Shapiro Wilk GOF Test**					
605					5% Shapiro Wilk Critical Value	0.905	Data appear Normal at 5% Significance Level					
606					Lilliefors Test Statistic	0.123	**Lilliefors GOF Test**					
607					5% Lilliefors Critical Value	0.192	Data appear Normal at 5% Significance Level					
608	**Data appear Normal at 5% Significance Level**											
609												
610	**Assuming Normal Distribution**											
611	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
612					95% Student's-t UCL	1294677				95% Adjusted-CLT UCL (Chen-1995)	1285667	
613										95% Modified-t UCL (Johnson-1978)	1294638	
614												
615	**Gamma GOF Test**											
616					A-D Test Statistic	0.608	**Anderson-Darling Gamma GOF Test**					
617					5% A-D Critical Value	0.745	Detected data appear Gamma Distributed at 5% Significance Level					
618					K-S Test Statistic	0.174	**Kolmogorov-Smirnov Gamma GOF Test**					
619					5% K-S Critical Value	0.194	Detected data appear Gamma Distributed at 5% Significance Level					
620	**Detected data appear Gamma Distributed at 5% Significance Level**											
621												
622	**Gamma Statistics**											
623					k hat (MLE)	5.305				k star (bias corrected MLE)	4.543	
624					Theta hat (MLE)	210175				Theta star (bias corrected MLE)	245451	
625					nu hat (MLE)	212.2				nu star (bias corrected)	181.7	
626					MLE Mean (bias corrected)	1115000				MLE Sd (bias corrected)	523142	
627										Approximate Chi Square Value (0.05)	151.5	
628					Adjusted Level of Significance	0.038				Adjusted Chi Square Value	149.4	
629												
630	**Assuming Gamma Distribution**											
631					95% Approximate Gamma UCL (use when n>=50))	1337069				95% Adjusted Gamma UCL (use when n<50)	1356546	
632												
633	**Lognormal GOF Test**											
634					Shapiro Wilk Test Statistic	0.904	**Shapiro Wilk Lognormal GOF Test**					
635					5% Shapiro Wilk Critical Value	0.905	Data Not Lognormal at 5% Significance Level					
636					Lilliefors Test Statistic	0.191	**Lilliefors Lognormal GOF Test**					
637					5% Lilliefors Critical Value	0.192	Data appear Lognormal at 5% Significance Level					
638	**Data appear Approximate Lognormal at 5% Significance Level**											
639												
640	**Lognormal Statistics**											
641					Minimum of Logged Data	12.99				Mean of logged Data	13.83	
642					Maximum of Logged Data	14.4				SD of logged Data	0.473	
643												
644	**Assuming Lognormal Distribution**											
645					95% H-UCL	1404809				90% Chebyshev (MVUE) UCL	1493276	
646					95% Chebyshev (MVUE) UCL	1660278				97.5% Chebyshev (MVUE) UCL	1892070	
647					99% Chebyshev (MVUE) UCL	2347380						
648												

	A	B	C	D	E	F	G	H	I	J	K	L
649	**Nonparametric Distribution Free UCL Statistics**											
650	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
651												
652	**Nonparametric Distribution Free UCLs**											
653					95% CLT UCL	1285919			95% Jackknife UCL	1294677		
654					95% Standard Bootstrap UCL	1282324			95% Bootstrap-t UCL	1292299		
655					95% Hall's Bootstrap UCL	1280671			95% Percentile Bootstrap UCL	1276000		
656					95% BCA Bootstrap UCL	1283500						
657					90% Chebyshev(Mean, Sd) UCL	1426735			95% Chebyshev(Mean, Sd) UCL	1567940		
658					97.5% Chebyshev(Mean, Sd) UCL	1763928			99% Chebyshev(Mean, Sd) UCL	2148908		
659												
660	**Suggested UCL to Use**											
661					95% Student's-t UCL	1294677						
662												
663	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
664	Recommendations are based upon data size, data distribution, and skewness.											
665	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
666	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
667												
668	**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be**											
669	**reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.**											
670												

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